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SITE NAME	SAUGET AREA 1
DOC ID #	153479
DOCUMENT VARIATION	_X_ COLOR **OR** ___ RESOLUTION
PRP	SAUGET AREA 1
PHASE	SAS
OPERABLE UNITS	
PHASE (AR DOCUMENTS ONLY)	___ Remedial ___ Removal ___ Deletion Docket ___ ___ Original ___ Update # ___ Volume ___ of ___

COMMENT(S)

VARIOUS SITE MAPS
FIGURES: 2-3 & 2-4

CERCLA
Screening Site Inspection Report

Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, IL 62794-9276

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1. INTRODUCTION

On September 22, 1993, the Illinois Environmental Protection Agency's Pre-Remedial Program was tasked by the U.S. Environmental Protection Agency (USEPA) to conduct a CERCLA Screening Site Inspection (SSI) of the P.T.s Showclub (also known as the Sauget Monsanto Landfill or Site P) (hereinafter referred to as Site P) located within the limits of the village of Sauget, Illinois.

The site was initially placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), on October 26, 1990 as a result of a request for discovery action initiated by the Illinois Environmental Protection Agency (IEPA). The action was taken as a result of the state's concern for the site's potential to allow chemical substances associated with past disposal practices to enter the environment and adversely impact human health and the environment.

The site was initially evaluated in the form of a CERCLA Preliminary Assessment (PA), prepared by Timothy J. Murphy of the IEPA, and was submitted to the Region V offices of the USEPA on September 26, 1991.

In 1986, Ecology and Environment was contracted by the Illinois EPA to conduct sampling activities in the Sauget area. This investigation was undertaken for the purpose of providing additional information on known or suspected contamination sites

within the village of Sauget. Sample results from these sampling event revealed the presence of volatiles, semi-volatiles, inorganic compounds (including lead and cyanide) in surface and/or subsurface soils of Site P. Analytic data obtained over the course of this investigation was used in the preparation of this report.

The purposes of an SSI have been stated by USEPA in a directive outlining Pre-Remedial program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS (Hazard Ranking System) score. 2) establish priorities among sites most likely to qualify for the NPL (National Priorities List). 3) identify the most critical data requirements for the listing SSI step. A Screening SI will not have rigorous data quality objectives (DQOs). Based on the refined factors, the site will then either be designated as SEA (site evaluation accomplished), or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA (Resource Conservation and Recovery Act)... Sites that are designated SEA or deferred to other statutes are not candidates for a listing SI.
>
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI (USEPA 1988).

The Region V offices of the USEPA have also requested that the Illinois EPA identify sites during the Screening Site Inspection that may require removal action to remediate an immediate human health and /or environmental threat. It is this author's analysis that the site does not pose an immediate threat that would warrant such a response action.

2. SITE BACKGROUND

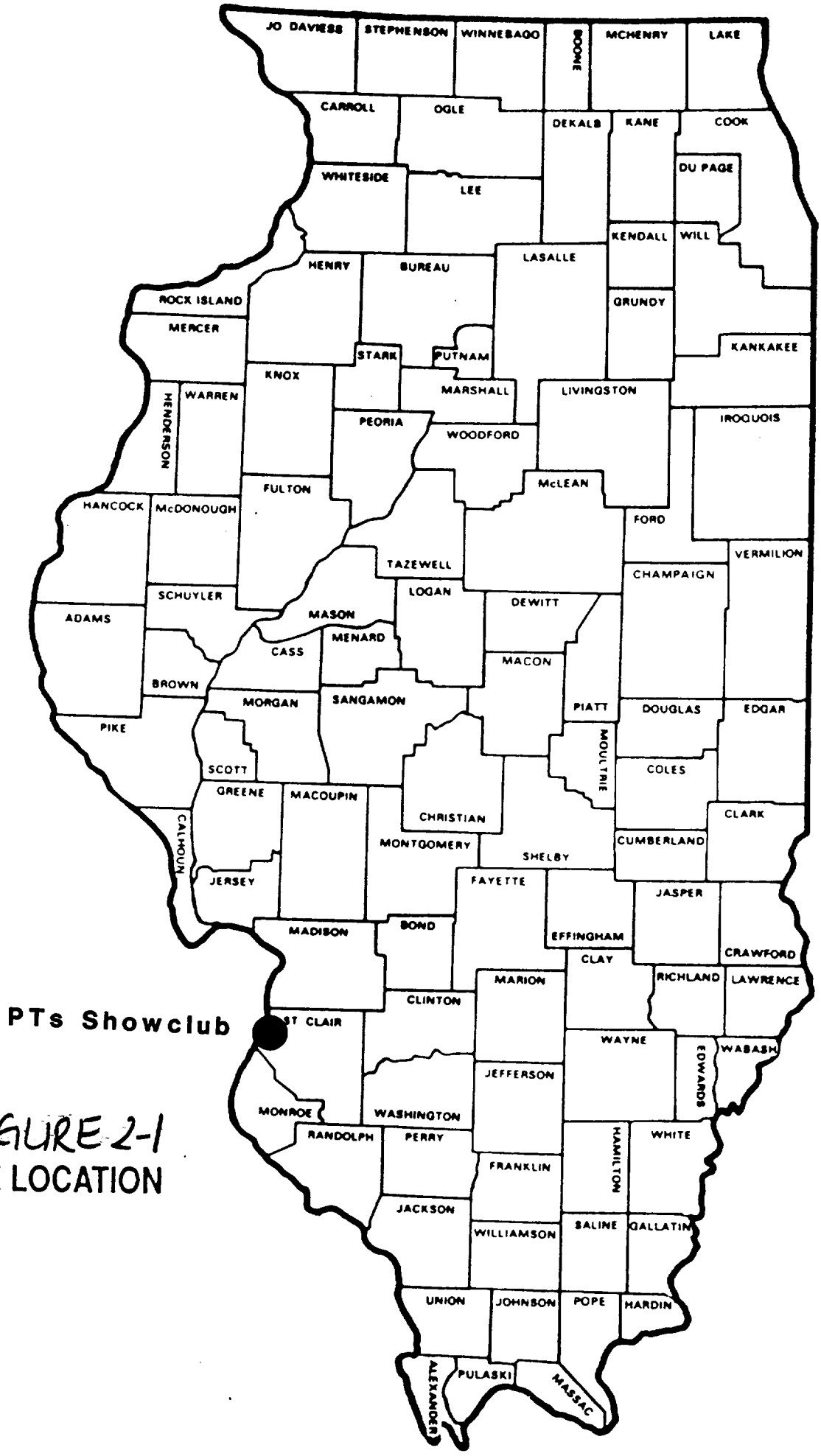
2.1 INTRODUCTION

This section includes information obtained over the course of the formal CERCLA Screening Site Inspection and previous Illinois Environmental Protection Agency investigation of this site.

2.2 SITE DESCRIPTION

Site P is an inactive, IEPA permitted landfill located in an industrialized and commercialized area of the village of Sauget, Illinois. The triangularly-shaped site covers approximately 20 acres and is situated west of Illinois Route 3 and just north of Monsanto Avenue (See Figures 2-1, 2-2, 2-3, 2-4, 2-5). Site P lies within the southern part of Section 23 and the northern part of Section 26 of Township 2 North, Range 10 West of the Third Principle Meridian in St. Clair County.

Site P is bordered on the west by the Terminal Railroad Association Railroad; on the south by Monsanto Avenue; and on the east by the Illinois Central Gulf Railroad. The two railroads converge to delineate the northern boundary, thus creating the triangulated site. The landfill can be seen during its operation in a 1978 aerial photograph contained in Section D of this report.



PTs Showclub

FIGURE 2-1
SITE LOCATION

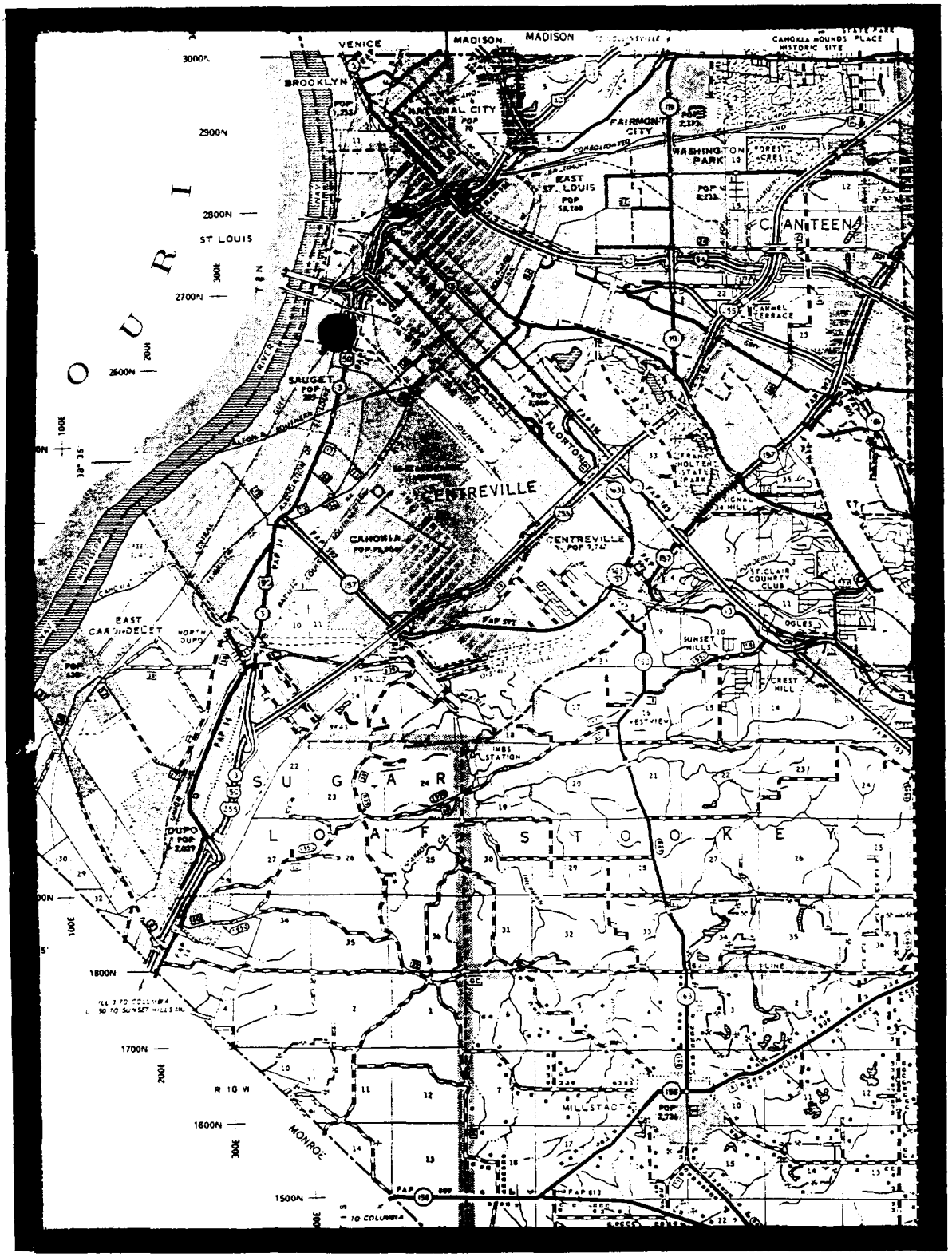
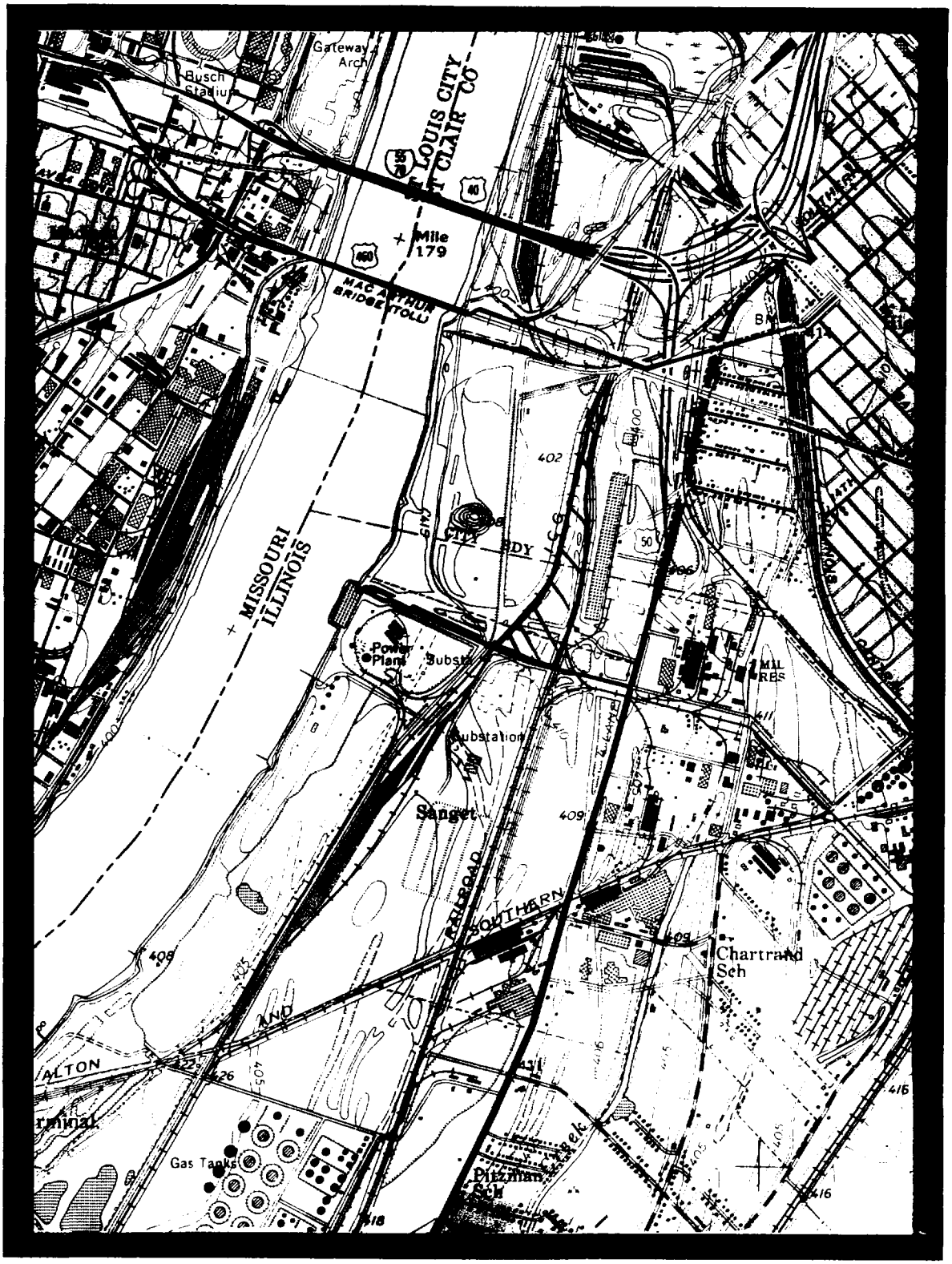


FIGURE 2-2

Regional Area Map

● SITE LOCATION

FIGURE 2-3



Source: IEPA, 1993. **Base Map:** Illinois Department of Transportation, 1974.
Scale 1:2000

SITE TOPOGRAPHY

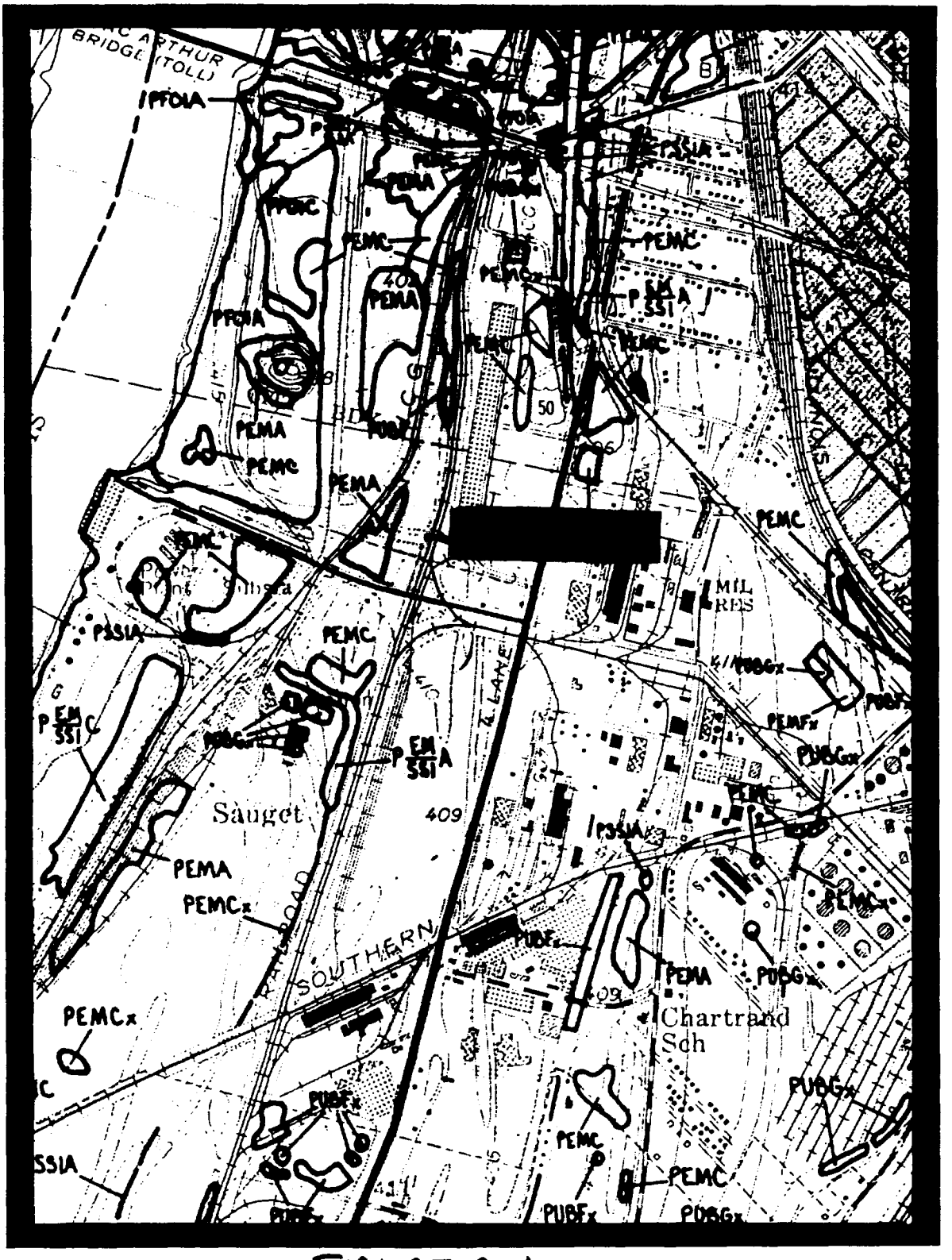


FIGURE 2-4
Wetland Map

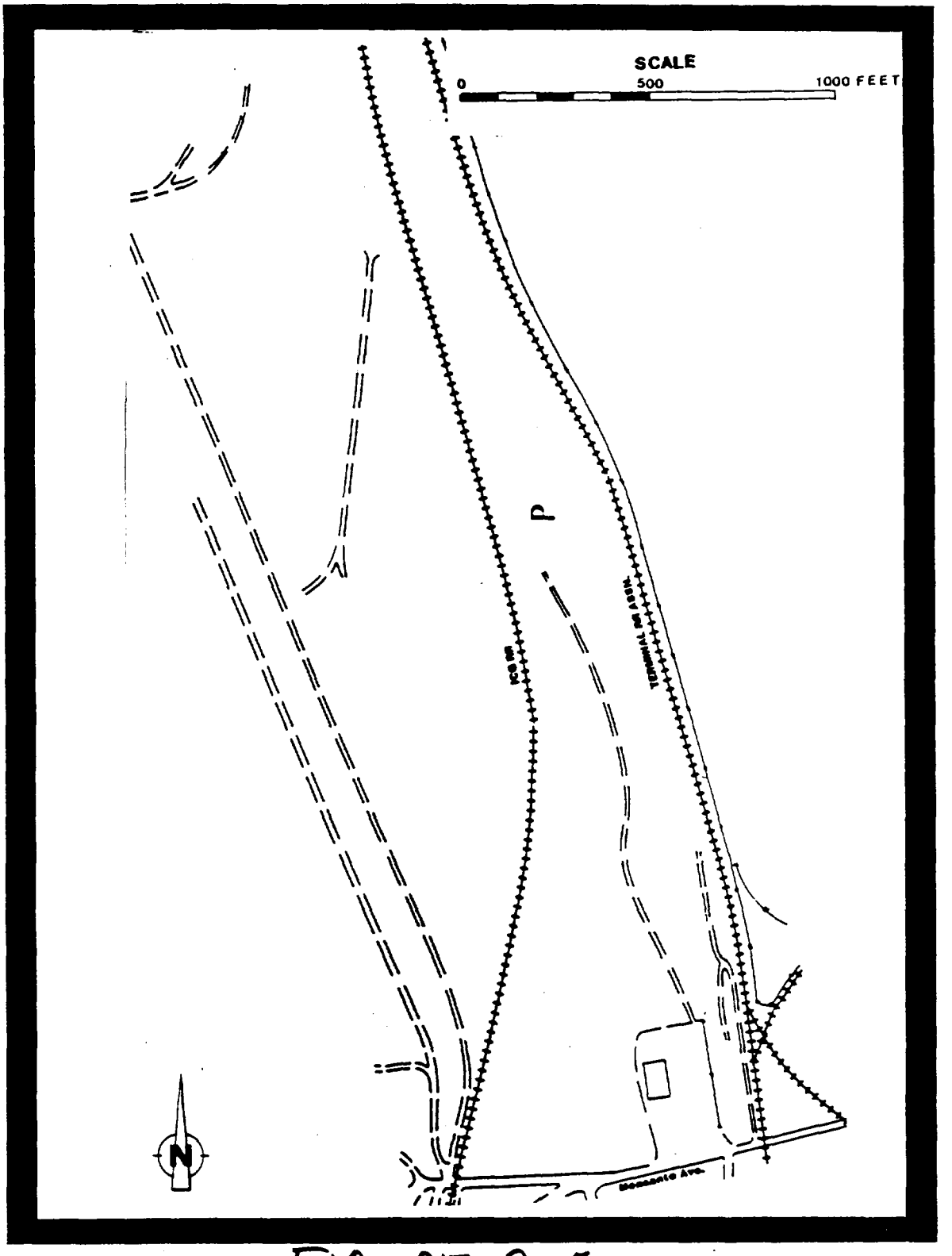


FIGURE 2-5
Site Map

The surface of the site is covered with cinder-like material and is vegetated with weeds and small trees. A nightclub, P.T.'s Showclub, is located on the southern portion of the site and covers approximately one acre of the site. The building is rectangular in shape and is approximately 3750 square feet in area. A gravel and asphalt parking lot surrounds the structure. Maps of the site show an unpaved road leading to the northern portion of the site. Access to this road is blocked by posts and chains.

The National Wetland Inventory Maps identify two wetland areas located near the east-central and southwest portions of the site. These areas are approximately three and four acres in size (See Figure 2-4).

Land use in the immediate area south and east of the site is heavy industry and commercial. Undeveloped areas lay generally to the north and west of the site. The nearest individual resident is located approximately 1/4 mile to the northeast of the site.

2.3 SITE HISTORY

According to IEPA Bureau of Land files, operations began at the site in 1972 when Mr. Paul Sauget of Sauget and Company entered into a lease agreement with the Union Electric Company to operate a waste disposal facility. In January of 1973, the IEPA issued an operating permit to Sauget and Company to accept only non-chemical waste from Monsanto. Sauget and Company subsequently applied for

and was granted, a supplemental permit in 1974 which allowed acceptance of general waste and 117,000 cubic yards of diatomaceous earth filter cake from Edwin Cooper, Incorporated (now Ethyl Corporation).

The IEPA began conducting routine inspections of the facility in 1974, at which time no violations were evident. In October of 1975, an inspector observed a small amount of yellowish, tar-like liquid in an area adjacent to several crushed fiber drums which were labelled "Monsanto ACL-85, Chlorine Composition." Sauget and Company and Monsanto were subsequently notified of this permit violation, and the matter was not further addressed. In December of 1977, an inspection revealed the disposal of approximately 25 metal containers (12-15 gallon) full of phosphorus pentasulfide (P2S5), a flammable solid. IEPA required Monsanto to excavate and remove all of this material from the site, and to discontinue disposal of any chemical wastes or packages.

During the same inspection, IEPA became aware of another potential problem. A slag pile located on Southern Railway property was being used for intermediate and final cover material at the landfill. Analysis of this slag showed it to be unsuitable as cover due to its high permeability and heavy metal content. Cinders from an unknown source were also being used as cover material at Site P, these materials also increased surface water infiltration and the resulting potential for leaching heavy metals and organic

constituents into the groundwater.

IEPA inspections of the landfill in 1978 and 1979 indicated the continued non-permitted disposal of "Monsanto ACL" filter residues and packages. The composition of this material is not known. According to the site operator at that time, this material would occasionally ignite when it came into contact with the filter cake waste from Edwin Cooper.

An Illinois-American Water Company distribution main was discovered in 1980 during a preparatory landfill excavation on the southern portion of the site. Following discovery of the water line, plans and permits were modified to include no waste disposal within 100 feet of the line. Landfill operations continued until 1984.

IEPA files contain information concerning waste quantities and characteristics for the Edwin Cooper filter cake that was disposed of at Site P. However, Monsanto's wastestream information was never made available to the Illinois Environmental Protection Agency. IEPA records indicate that approximately 117,000 cubic yards of Edwin Cooper filter cake was accepted at Site P. Based on EP toxicity results submitted in 1973, the filter cake was classified as non-hazardous special waste (authorization permit number 740017). According to IEPA Bureau of Land files, additional analytical data is available for a filter cake composite sample from Edwin Cooper in 1979 which indicates elevated levels of lead

at 18.4 parts per million (ppm) cadmium at 1.8 ppm, zinc at 7220 ppm and a Ph of 11.22. No groundwater monitoring program has been established for Site P, nor have wastes at the site been fully characterized.

State and federal aerial photographs that predate the 1970's, show no indications of previous waste disposal activities at the site. Prior to 1979, according to Bureau of Land files, portions of Site P were owned by the Union Electric Company and the Illinois Central Gulf Railroad. Currently, Site P is owned as trust property for Paul Sauget (Chicago Trust and Title) and Union Electric Company in St. Louis.

In 1986, IEPA contracted Ecology and Environment, Incorporated (E&E) to investigate 12 suspected uncontrolled hazardous waste sites and six segments of Dead Creek in Sauget and Cahokia. Site P was among the 12 sites at which soil borings, and subsurface soil samples were collected. The results of E&E's investigation were used in preparation of this report.

2.4 APPLICABILITY OF OTHER STATUTES

As previously mentioned, Site P is an inactive landfill which received municipal, commercial, and industrial wastes from approximately 1972 to its close in 1984. Due to the nature of the materials received and the timeframe of its operational history, the site is not subject to the regulatory requirements of either

the Resource Conservation and Recovery Act (RCRA), the Atomic Energy Act (AEA), Toxic Substances Control Act (TSCA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), or the Uranium Mill Tailings Radiation Control Act (UMTRCA).

3. SITE INSPECTION ACTIVITIES AND ANALYTICAL RESULTS

3.1 INTRODUCTION

This section outlines procedures utilized and observations made during the state financed E&E Sauget Study of 1986. Individual subsections address field sampling procedures, analytical results and key sample summary. The sampling was conducted in accordance with the approved site inspection work plan of 1986, which was developed and submitted to the USEPA Region V offices prior to the initiation of field activities.

3.2 SOIL SAMPLING

During the February 11 and 12, 1987 investigation of Site P, five 30-40 foot soil borings were drilled to investigate subsurface conditions at the site. A total of four samples were taken from these borings. Boring logs indicate that materials within the landfill consisted of silty clay, cinders, slag and refuse which had been disposed directly on the land surface. The thickness of the fill ranges from 13 feet at boring P1 to 28 feet at boring P2. In general, the surface of the site is covered with 1-2 feet of cinders and slag. Fill material was observed at all five boring locations. With the exception of boring P1, fine to medium grained sand was found immediately below the fill in each of the borings. This sand was present to boring termination at 30-40 feet. In P1, five feet of brown silty clay was found to exist between the fill materials and the fine to medium-grained sand. The absence of clay

and the relatively greater thickness of the fill at other boring locations suggests that clay materials may have been scraped from the surface to allow for the disposal of additional debris.

According to E&E, significantly contaminated waste material layers were generally not observed, although air monitoring equipment noted gases in some split-spoon samples containing fill. The boring logs are contained in Appendix F of this report and Table 3-1 details sampling activity at the site.

3.3 FIELD SAMPLING PROCEDURES

Soil borings were drilled using 3 3/4 inch ID hollow-stem augers. Split-spoon samples at 2.5 or 5-foot intervals were collected at all boring locations. Samples were obtained by driving a 2-inch OD standard split-spoon sampler (ASTM D1586) with a 140-pound weight, free-falling 30 inches. The driving resistance was recorded for each 6-inch increment sampled with the split-spoon sampler.

After opening the split-spoon, the samples were screened with a photoionization meter (HNu) for volatile organic compounds, and readings were recorded in a logbook. A visual description of each sample was recorded on field boring logs by the project geologist. The description included the texture, density, structure, color, mineralogy, moisture content, and thickness of the layers, as well as the depth to the water table.

TABLE 3-1
BORING ACTIVITIES

SAMPLE	DEPTH	APPEARANCE	LOCATION
P-1	0-10' 25-35'	Fill Brown, fine, medium sand	Boring located along eastern boundary of site, approx. one-hundred and fifty feet northeast of P.T.s Showclub.
P-2	0-40'	Cinders, debris, silty clay, gray to brown medium sand.	Boring located approx. four-hundred feet to the north of P.T.s Showclub.
P-3	0-30'	Cinders, debris, silty clay and sand	Boring located approx. one-thousand feet to the north of P.T.s Showclub.
P-4	0-10' 25-35'	Fill mixed with fine to medium brown san	Boring located approx. one-thousand and six-hundred feet to the north of P.T.s Showclub.

The entire contents of each spit-spoon sample was retained and placed in laboratory-cleaned 32-ounce glass jars. To facilitate future sample screening and compositing, field samples from two consecutive split-spoon intervals were stored together in each 32-ounce jar (e.g., samples from the 1 to 2.5 foot and 3.5 to five foot intervals were combined in one 32-ounce jar). The sample jars were suitably boxed, marked, and labeled with the date, boring number, and the depth of each sample within the jar. Immediately following the completion of each boring, samples were screened for organic compounds using an OVA and E&E screening methodology. Following screening, depth intervals from each boring were selected for compositing and chemical analysis, based on screening results and visual observation of samples.

With the exception of P1-53 and P2-54, all samples were composited from depth interval samples collected from within a single boring. In sample P1-53, samples from the 0- to 10-foot depth interval in borings P-1, P-2, P-3, and P-4 were composited; in sample P2-54, samples from the 25- to 35-foot interval were composited from the same four borings. This was done because of the limited number of samples scheduled for Site P during the Sauget sites study performed by E&E under contract with the Illinois EPA and the desire to have chemical data for a wider portion of the site.

Depth interval samples were composited in the following manner:

* The entire portion of each depth interval to be composited was thoroughly mixed in a clean, stainless steel bowl using a stainless steel tablespoon.

* Material was chopped, mixed, and stirred until it was reasonably homogenous.

* A stainless steel tablespoon was used to transfer the material to the appropriate sample containers. A clean stainless steel tablespoon was dedicated for materials for each composite.

* Sample jars were sealed, labeled, and packaged for shipment as specified in the project QAPP.

3.4 DECONTAMINATION PROCEDURES

Prior to the mobilization of the drill rig on each site, the rig and all associated drilling equipment were thoroughly cleaned with a hot water pressure wash system. All tools and eqipment were steam-cleaned between borings to prevent cross-contamination. During drilling, the split-spoon sampler was cleaned between uses by scrubbing with brushes in a trisodium phosphate solution followed by rinses of deionized water, dilute acetone, dilute hexane, dilute acetone, and a final deionized water rinse. Spent decontamination fluids were containerized in a 55-gallon drum.

3.5 ANALYTICAL RESULTS

Analysis of four samples of subsurface soils collected from two borings at Site P revealed the presence of eight volatile compounds present in sample P1-53 and two volatile compounds in sample P-54. No volatiles were detected in samples P5-55 and P5-56. The highest concentrations of any volatile contaminants detected were 0.41 milligrams per kilogram of soil (mg/kg) of toluene and 0.45 mg/kg xylenes in sample P1-53.

Three semi-volatile compounds were found to be present in P1-53. The analysis showed 3.9J mg/kg of phenol, 8.9J mg/kg of 1,4-dichlorobenzene and 3.6J mg/kg of 1,2-dichlorobenzene in the sample. There were no semi-volatiles were detected in samples: P2-54, P5-55, and P5-56. Table 3-2 in Appendix D provides a summary of analytic results.

3.6 KEY SAMPLES

Table 3-3 identifies those samples taken during the CERCLA Screening Site Inspection which were shown to contain contaminants at levels which were significantly higher than found in the established background sample.

TABLE 3-2
KEY SAMPLE SUMMARY TABLE

PT's Showclub ILD984809295 SAMPLING POINT PARAMETER	P5-56 2-12-87 Background	P1-53 2-11-87	P2-54 2-11-87	P5-55 2-12-87
VOLATILES (PPB)				
Chloroform	5.0 U	10.0	--	--
Benzene	5.0 U	39.0	--	--
4-Methyl-2-Pentanone	10.0 U	39.0		--
2-Hexanone	10.0 U	30.0	--	--
Toluene	5.0 U	330.0	--	--
Chlorobenzene	5.0 U	110.0	--	--
Ethylbenzene	5.0 U	95.0	--	--
Xylene(total)	5.0 U	360.0	--	--
TICs		6.0	4.0	1.0
SEMIVOLATILES (PPB)				
Phenol	330.0 U	3100.0 J	--	--
1,4-Dichlorobenzene	330.0 U	7100.0 J	--	--
1,2-Dichlorobenzene	330.0 U	2900.0 J	--	--
Di-n-Butylphthalate	260.0 J	13000.0 J	--	
Tridecane	--	130000.0 J	--	--
Hexadecane	--	150000.0 J	--	--
5-Propyl-tridecane	--	140000.0 J	--	--
Molecular Sulfur	--	85000.0 J	--	--
2,3-Dimethyl Undecane	--	--	--	--
Hexadecane	--	--	560.0 J	--
TICs	0.0	16.0	10.0	0.0
INORGANICS (PPM)				
Cadmium	1.0 U	3.1	--	--
Lead	72.0 *	--	3.0 *	426.0 *
Mercury	0.1 U	3.1	54	--
Zinc	59.0 *	370.0 *	14.0 *	40.0 *
Cyanide	1.0 U	--	11.0	12.0

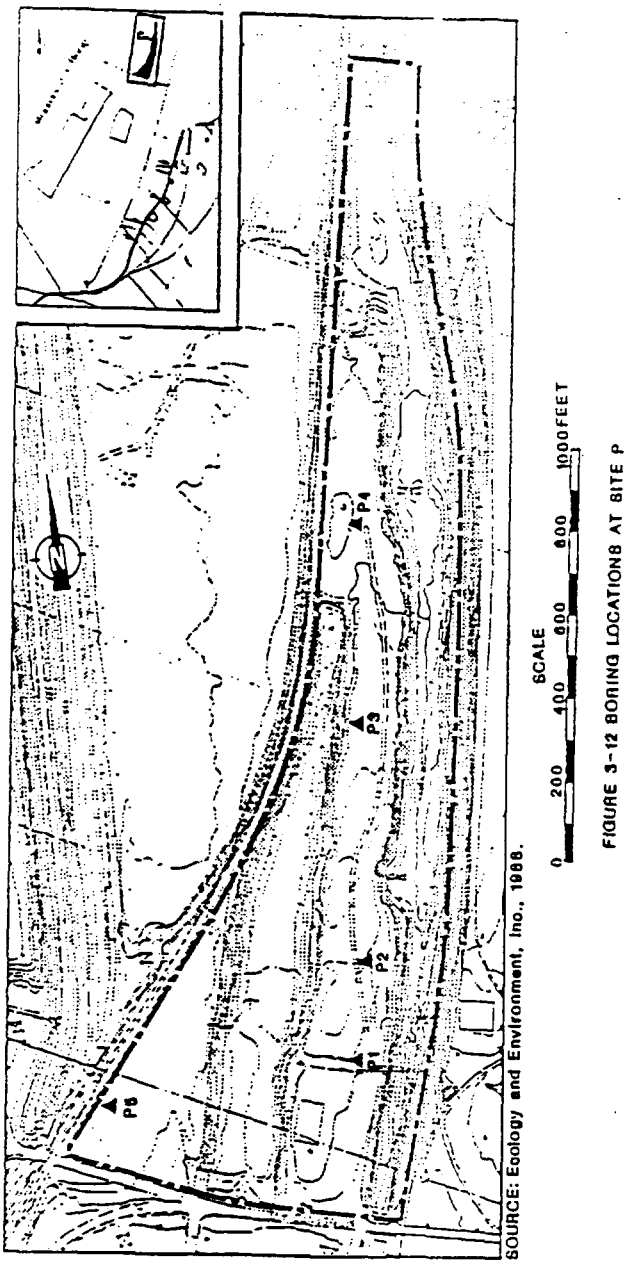


FIGURE 3-1

Sample Location Map

4. IDENTIFICATION OF SOURCES

4.1. INTRODUCTION

This section discusses the hazardous waste source which has been identified in the initial stages of the CERCLA Site Investigation.

Information concerning size, volume, waste type and waste composition of the source was compiled during the initial Site Assessment and subsequent Site Inspection. The Sauget-Monsanto Landfill, which comprises Site P, is the only identifiable source at this site.

4.2 SAUGET-MONSANTO LANDFILL

The inactive, unlined Sauget-Monsanto Landfill is approximately 20 acres in size. It was in operation from 1972 to 1984. The property was owned by Union Electric of St. Louis and was leased by Paul Sauget in partnership with Monsanto Chemical.

In 1973, the landfill was permitted to accept only non-chemical waste from Monsanto. However, as previously stated, there were several incidents reported in which other unpermitted wastes were discovered at the site.

File information obtained from the Illinois Environmental Protection Agency indicates that filter cake from Edwin Cooper (now Ethyl Corporation) was also disposed of at the landfill. At times,

the filter cake and waste from Monsanto would come into contact with each other and begin to ignite.

Cinders and fly ash from the Southern Railway slag pile were used for cover material.

The extent of site operations was calculated with the use of aerial photographs of the site. Calculations show that operations extended approximately 2000 feet north of Monsanto Avenue and the area covered by the landfill was approximately 20 acres.

According to wetland maps, there are two wetland areas located on-site, approximately an expression of the groundwater to surface water.

Compounds detected during the E&E sampling event included the following:

5. MIGRATION PATHWAYS

5.1 INTRODUCTION

The CERCLA Site Assessment Program identifies three migration pathways and one exposure pathway by which hazardous substances may pose a threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these four pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

This section presents and discusses information collected during the CERCLA Screening Site Inspection of Site P. This information, together with information documented in other sources, will be utilized in analyzing the site's impact on the four pathways and the various human and environmental targets within the established target distance limits.

Discussions of the pathways will include pathway descriptions, contaminant sources, and targets, such as human populations, fisheries, endangered species, wetlands and other sensitive environments.

5.2 GROUNDWATER

The site is located in an area known as the American Bottoms. ISGS well logs indicate that the upper stratigraphy in this area consists of 70-120 feet of unconsolidated alluvium and glacial

outwash overlying Mississippian-aged limestone and sandstone formations (Ste. Genevieve and St. Louis Limestones). The valley fill deposits are composed of two formations, the uppermost being the Cahokia Alluvium followed by the Mackinaw Member of the Henry Formation.

The Cahokia Alluvium is composed predominantly of silt, clay and fine sand deposits, generally indicative of an aggrading environment. In the vicinity of Dead Creek, these deposits vary in thickness, with a range of 15 to 30 feet. This formation was laid down via flood events, eolian activity, bank slumping, erosion and/or slugs of material deposited directly by tributary streams. The Mississippi River has frequently reworked this formation in such a way that coarser material is intermingled with finer-grained deposits.

Underlying the Cahokia Alluvium is the Mackinaw Member of the Henry Formation. This formation is composed of sand and gravel from glacial outwash. In the Dead Creek area, this material rests directly on the bedrock surface and varies between 70 and 100 feet in thickness. Appendix E contains area well logs which describe the area geology.

Local hydrogeologic information has been obtained through groundwater monitoring in the Sauget area. In the vicinity of Site P, shallow sand and gravel deposits close to the ground surface,

yield significant quantities of water for nearby homes and businesses. Horizontal groundwater movement in the shallow deposits generally follow the land surface topography, with lateral movement toward local discharge zones (wells and small streams), and some movement into the deeper unconsolidated aquifers. Groundwater is encountered between 10 and 28 feet below the ground surface in the Dead Creek area. Under the site, the sand and gravel aquifer (aquifer of concern) is encountered at around 40 feet due to the build up of the landfill. Groundwater in the deeper unconsolidated valley fill deposits generally follows the bedrock surface. Accordingly, groundwater generally flows downstream through the sand and gravel aquifers in much the same direction as the original stream flow, but at a much slower rate.

With regards to the groundwater pathway, residents in the vicinity of the site obtain their water from the Illinois-American Water Company (IAWC). The company obtains water from an intake upstream from Sauget and sells water to the various water departments and districts within the Sauget/Cahokia area. According to Bureau of Land files, some area residents obtain water from shallow wells and are believed to be used for irrigational purposes.

5.3 SURFACE WATER PATHWAY

There were no surface water or sediment samples collected during the February 1986 site investigation at Site P.

Site drainage is controlled by the railroad embankments surrounding the site on all sides except the south. A 500-year levee protects the site from the river's flood events. Any drainage that should happen to runoff the site would make its way to the Mississippi River via the American Bottoms Wastewater Treatment Plant (WWTP). A 15-mile surface water map is located in Appendix B of this report. The probable point of entry (PPE) is the American Bottoms outfall at river mile 178.2. The average discharge of the Mississippi River, as measured over a 128 year period at St. Louis, Missouri, is 179,800 cubic feet per second. The 15-mile surface water target distance limit extends to Mississippi River mile 163.2.

Drinking Water Threat

According to IEPA Public Water Supply files, there are no surface water drinking water intakes located within the 15-mile target distance limit. At river mile 149, approximately 28 miles south of the outfall, the village of Crystal City, Missouri (population 4000) utilizes a Ranney well, adjacent to the Mississippi River for drinking water. A Ranney well is assumed to draw in surface water due to its construction and proximity to the river.

On the Illinois side of the Mississippi River, the nearest drinking water intake is located approximately fifty river miles downstream; at river mile 110. The intake supplies water to the village of Chester and surrounding communities in Randolph County.

Environmental Threat & Human Food Chain

According to U.S. Fish and Wildlife Service National Wetland inventory maps, there are two defined wetlands located on-site. They comprise a total area of approximately eight acres.

According to the Illinois Department of Conservation, the Resource Inventory for the Mississippi River between river miles 178-162 show numerous fishing areas, sport fishing areas, important wildlife habitat and bald eagle use (See Appendix #).

5.4 SOIL EXPOSURE PATHWAY

There are approximately 25 employees located on-site at PT's Showclub, and due to the fact that it is a commercial establishment, there are a number of patrons who frequent the establishment. Cinders and ash are known to have been used as final cover at the landfill.

There are no residences, schools or daycares located within 200 feet of the site.

The site is accessible, as there is no permanent fencing which would bar access to the site. The only barrier, a chain between two posts blocks vehicular traffic from accessing the site north of PT's Showclub.

5.5 AIR PATHWAY

Air sampling was not conducted at the site during the sampling event of February 1986. However, the potential for a release to air exists due to the presence of cinders and ash at the surface of the site.

Approximately 183,000 people live within four miles of the landfill in Sauget. The following table provides information concerning populations located within a four-mile radius of the site.

Distance	Population
On a Source	0
Greater than 0-1/4	0
Greater than 1/4 to 1/2	304
Greater than 1/2 to 1 mile	2812
Greater than 1 to 2 miles	36,958
Greater than 2 to 3 miles	61,505
Greater than 3 to 4 miles	81,571

Note: Worker populations are not included.

According to IEPA Bureau of Land files for Site P, the operator of the landfill reported that whenever waste from Edwin Cooper would come into contact with waste from Monsanto, it would ignite.

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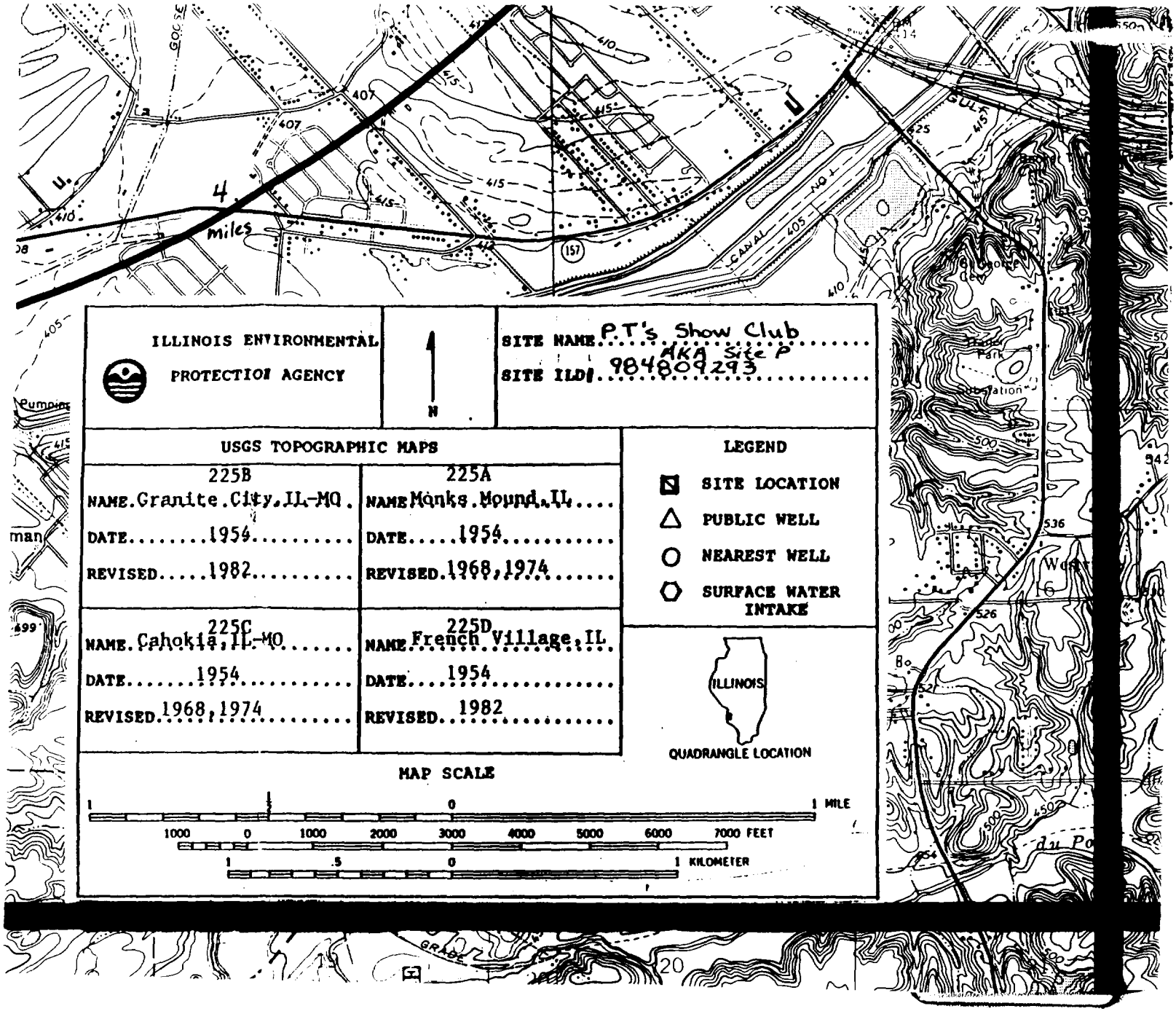
SITE NAME	**SAUGET AREA 1**		
DOC ID #	**153479**		
DESCRIPTION OF ITEM(S)	**USGS TOPOGRAPHIC MAPS**		
REASON WHY UNSCANNABLE	**_X_ OVERSIZED**	**OR**	**___ FORMAT**
DATE OF ITEM(S)	**1982**		
NO. OF ITEMS	**2**		
PHASE	**SAS**		
PRP	**SAUGET AREA 1**		
PHASE (AR DOCUMENTS ONLY)	**___ Remedial ___ Removal ___ Deletion Docket ___ AR** **___ Original ____ Update # ____ Volume ____ of ____**		
O.U.			
LOCATION	**Box # _____ Folder # _____ Subsection _____**		
COMMENT(S)			
PARTIAL COPY			


ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
N
SITE NAME P.T's Show Club AKA Site P
SITE ILD# 9848092 93
USGS TOPOGRAPHIC MAPS
225B
NAME Granite City, IL-MO
DATE 1954
REVISED 1982
225A
NAME Monks Mound, IL
DATE 1954
REVISED 1968, 1974
225C
NAME Cahokia, IL-MO
DATE 1954
REVISED 1968, 1974
225D
NAME French Village, IL
DATE 1954
REVISED 1982
LEGEND
SITE LOCATION
PUBLIC WELL
NEAREST WELL
SURFACE WATER INTAKE
ILLINOIS
QUADRANGLE LOCATION
MAP SCALE
1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

[redacted]

10 acres

20 acres

ACREAGE GUIDE

or information including a narrative report concerning the land resources depicted on this document may be available. Information, contact:

Regional Director (ARDE) Region III
U.S. Fish and Wildlife Service
Federal Bldg., Ft. Snelling (AD/SSP)
Twin Cities, Minnesota 55111

wetland boundaries established [illegible] interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on this document.

Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

R2OWH
(LINEAR DEEPWATER HABITAT)

D — Primarily represents upland areas, but may include unclassified wetlands such as man-modified areas, non photo-identifiable areas and/or unintentional omissions.

M — MARINE

1 — SUBTIDAL

2 — INTERTIDAL

E — EST

1 — SUBTIDAL

R — RIVERINE

TIDAL

2 — LOWER PERENNIAL

3 — UPPER PERENNIAL

4 — INTERMITTENT

5 — UNKNOWN PERENNIAL

L —

1 — LIMNETIC

P — PALUSTRINE

WATER REGIME

Non-Tidal

Tid

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SITE: PT's Show Club AKA Sauget/Monsanto Ldfl., Site P

SITE ILD 984809293

): Webster Groves, MO-IL

QUAD: Cahokia, IL-MO

BER: 224 D

NUMBER: 225 C

E: 1974/1988 Wetland

DATE: 1974/1988 Wetland

[redacted]

TABLE 3-3
SAMPLE SUMMARY

PT's Showclub ILD984809295				
SAMPLING POINT	P5-56 2-12-87	P1-53 2-11-87	P2-54 2-11-87	P5-55 2-12-87
PARAMETER	Background			
VOLATILES (PPB)				
Chloroform	5.0 U	10.0	--	--
2-Butanone (MEK)	21.0 B	150.0 B	64.0 B	
Benzene	5.0 U	39.0	--	--
4-Methyl-2-Pentanone	10.0 U	39.0	24.0 B	--
2-Hexanone	10.0 U	30.0	2.0 BJ	--
Toluene	5.0 U	330.0	--	--
Chlorobenzene	5.0 U	110.0	--	--
Ethylbenzene	5.0 U	95.0	--	--
Xylene(total)	5.0 U	360.0	--	--
2-Butanol	UNKNOWN>TIC	77.0 J		
TICs		6.0	4.0	1.0
SEMIVOLATILES (PPB)				
Phenol	330.0 U	3100.0 J	--	--
1,4-Dichlorobenzene	330.0 U	7100.0 J	--	--
1,2-Dichlorobenzene	330.0 U	2900.0 J	--	--
Di-n-Butylphthalate	260.0 J	13000.0 J		
bis(2-Ethylhexyl)phthalate	180.0 J	--	--	--
Tridecane	UNKNOWN>TIC	130000.0 J	--	--
Hexadecane	UNKNOWN>TIC	150000.0 J	--	--
5-Propyl-tridecane	UNKNOWN>TIC	140000.0 J	--	--
Molecular Sulfur	UNKNOWN>TIC	85000.0 J	290.0 J	--
2,3-Dimethyl Undecane	UNKNOWN>TIC	--	470.0 J	--
Hexadecane	UNKNOWN>TIC	--	560.0 J	--
TICs	0.0	16.0	10.0	0.0
INORGANICS (PPM)				
Cadmium	1.0 U	3.1	--	--
Lead	72.0 *	--	3.0 *	426.0 *
Mercury	0.1 U	3.1	54.0	--
Zinc	59.0 *	370.0 *		
Cyanide	1.0 U	--	11.0	12.0

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane
Bromomethane
Vinyl Chloride
Chloroethane
Methylene Chloride
Acetone
Carbon Disulfide
1,1-Dichloroethene
1,1-Dichloroethane
1,2-Dichloroethene (total)
Chloroform
1,2-Dichloroethane
2-Butanone
1,1,1-Trichloroethane
Carbon Tetrachloride
Vinyl Acetate
Bromodichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
Trichloroethene
Dibromochloromethane
1,1,2-Trichloroethane
Benzene
trans-1,3-Dichloropropene
Bromoform
4-Methyl-2-pentanone
2-Hexanone
Tetrachloroethene
1,1,2,2-Tetrachloroethane
Toluene
Chlorobenzene
Ethylbenzene
Styrene
Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane
bis(2-Chloroethyl)Ether
Benzyl Alcohol
bis(2-Chloroisopropyl)Ether
N-Nitroso-Di-n-Propylamine
Nitrobenzene
Hexachlorobutadiene
2-Methylnaphthalene
1,2,4-Trichlorobenzene
Isophorone
Naphthalene
4-Chloroaniline
bis(2-chloroethoxy)Methane
Hexachlorocyclopentadiene
2-Chloronaphthalene
2-Nitroaniline
Acenaphthylene
3-Nitroaniline
Acenaphthene
Dibenzofuran
Dimethyl Phthalate
2,6-Dinitrotoluene
Fluorene
4-Nitroaniline
4-Chlorophenyl-phenylether
2,4-Dinitrotoluene
Diethylphthalate
N-Nitrosodiphenylamine
Hexachlorobenzene
Phenanthrene
4-Bromophenyl-phenylether
Anthracene
Di-n-Butylphthalate
Fluoranthene
Pyrene
Butylbenzylphthalate
bis(2-Ethylhexyl)Phthalate
Chrysene
Benzo(a)Anthracene
3,3'-Dichlorobenzidene
Di-n-Octyl Phthalate
Benzo(b)Fluoranthene
Benzo(k)Fluoranthene
Benzo(a)Pyrene
Indeno(1,2,3-cd)Pyrene
Dibenz(a,h)Anthracene
Benzo(g,h,i)Perylene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid
Phenol
2-Chlorophenol
2-Nitrophenol
2-Methylphenol
2,4-Dimethylphenol
4-Methylphenol
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
4-Chloro-3-methylphenol
2,4-Dinitrophenol
2-Methyl-4,6-dinitrophenol
Pentachlorophenol
4-Nitrophenol

Pesticide/PCB Target Compounds

alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Heptachlor
Aldrin
Heptachlor epoxide
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin Ketone
Endosulfan Sulfate
Methoxychlor
alpha-Chlorodane
gamma-Chlorodane
Toxaphene
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260

Inorganic Target Compounds

Aluminum
Antimony
Arsenic
Barium
Beryllium
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
Thallium
Vanadium
Zinc
Cyanide
Sulfide
Sulfate

U.S.E.P.A. DEFINED DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
• U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
• J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
• C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
• B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
• D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values are flagged with the "D" flag.	not used

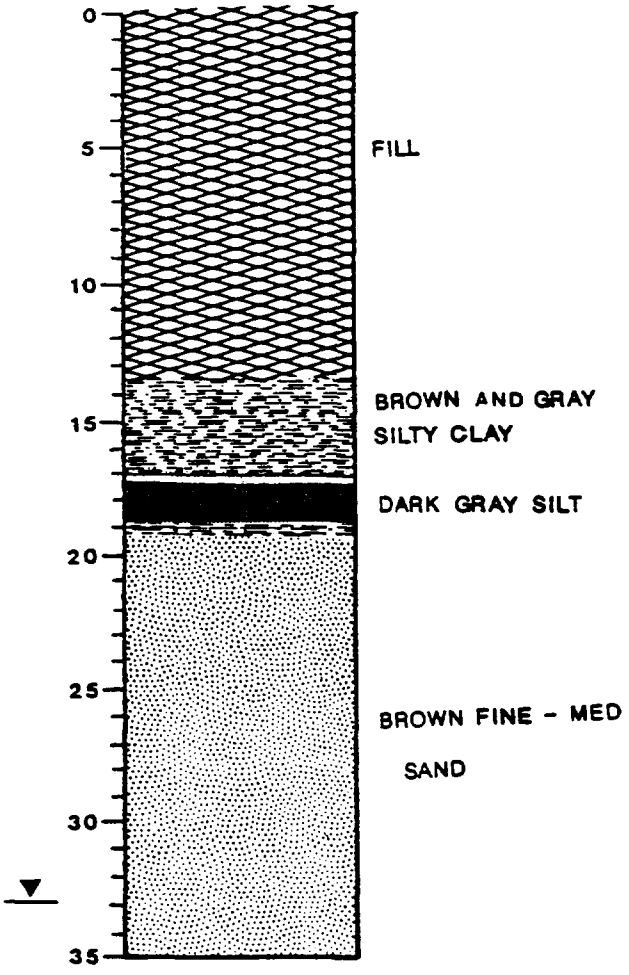
QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
• E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference
• A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
• M	not used	Duplicate injection (a QC parameter) not met.
• N	not used	Spiked sample (a QC parameter) recovery not within control limits.
• S	not used	The reported value was determined by the Method of Standard Additions (MSA).
• W	not used	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
• *	not used	Duplicate analysis (a QC parameter) not within control limits.
• +	not used	Correlation coefficient for MSA (a QC parameter) is less than 0.995.

Site P
Boring #082

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-11-87
Prepared by Tim Maley

Depth (ft) Description

P – 1



Boring/Well No. P-1
Location Site P
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/11, 2/11/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 35.0 ft.
Casing and Screen Diam. _____
Screen Interval _____
Screen Type _____
Stickup _____
Well Type _____
Well Construction:
Filter Pack _____
Seal _____
Grout _____
Lock No. _____

TEST DATA

Static Water Elev. _____ Date _____
Static Water Elev. _____ Date _____
Slug Test Yes____ No____
Test Date _____
Hydraulic Conductivity _____
Other _____

WATER QUALITY

Samples Taken Yes____ No X
No. of Samples _____
Types of Samples _____

Date Sampled _____
Samplers _____
Samples Analyzed for _____

Split Samples Yes____ No X
Recipient _____

Comments Subsurface soil samples from boring 0 - 10' and 25 - 35' analyzed for HSL compounds.

REMARKS

Ground elev. 418.41

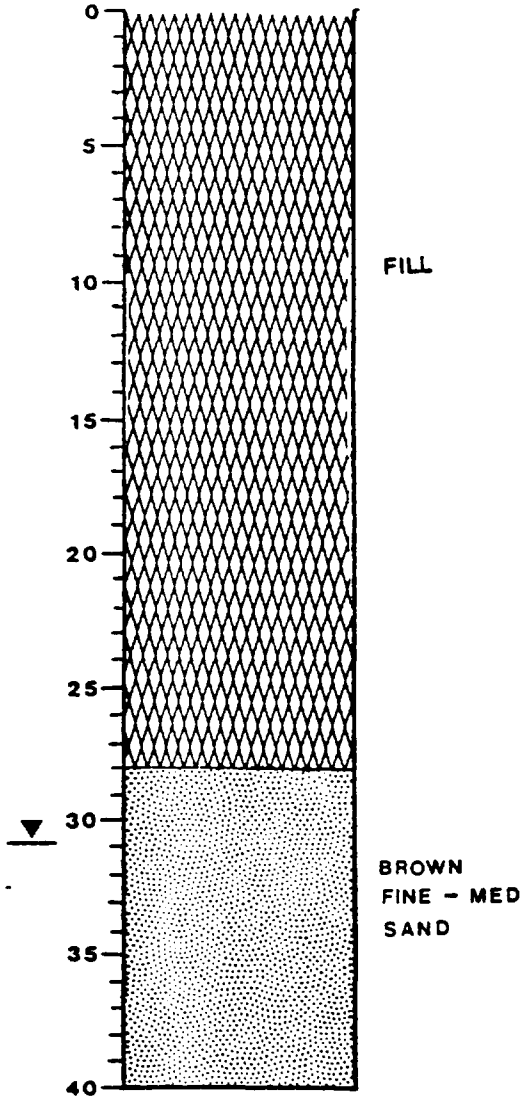
Site Dead Creek Site-P Boring/Well No. P-1

Sample Depth	Blow Count	Description
		Crushed limestone on surface.
1 - 2.5	4-3-3	FILL consisting of black sandy CLAY with crushed limestone, slag gravel, coal, and cinders.
3.5 - 5	4-3-3	Same as above.
6 - 7.5	5-7-25/3	FILL consisting of various debris including paper and plastic products, slag gravel, asphalt, and silty clay. Large obstruction encountered @ 7.5'.
8.5 - 10	6-12-10	FILL consisting of brown silty CLAY with various debris including paper products, small gravel, and fine to coarse grain sand. Wet.
11 - 12.5	6-17-3	Same as above.
		FILL discontinues @ 13.5'
13.5 - 15	3-6-7	Dark brown-dark gray silty CLAY. Slightly mottled. Trace of very fine grain sand. Dry.
16 - 17.5	2-4-6	Same as above to 17'. 4" layer of gray fine grain sand @ 17-17 1/3'. Dry. Then dark gray SILT. Trace of very fine grain sand. Dry.
18.5 - 20	3-5-8	Dark gray very fine grain SAND. Trace of silt. 2" gray silty clay layer @ 19'. Then light gray fine to medium grain SAND. Dry.
21 - 22.5	6-10-12	Brown medium grain SAND. Trace of coarse grain sand and small gravel. Dry.
23.5 - 25	6-13-12	Same as above.
28.5 - 30	2-5-7	Same as above.
33.5 - 35	3-5-10	Same as above. Wet.
		E.O.B. @ 35'.

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-11-87
Prepared by Tim Maley

Depth (ft) Description

P - 2



Boring/Well No. P-2
Location Site P
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/11, 2/11/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 40.0 ft.
Casing and Screen Diam. ____
Screen Interval ____
Screen Type ____
Stickup ____
Well Type ____
Well Construction:
Filter Pack ____
Seal ____
Grout ____
Lock No. ____

TEST DATA

Static Water Elev. ____ Date ____
Static Water Elev. ____ Date ____
Slug Test Yes____ No____
Test Date ____
Hydraulic Conductivity ____
Other ____

WATER QUALITY

Samples Taken Yes____ No X
No. of Samples ____
Types of Samples ____

Date Sampled ____
Samplers ____
Samples Analyzed for ____

Split Samples Yes____ No X
Recipient ____

Comments ____

REMARKS

Ground elev. 423.62

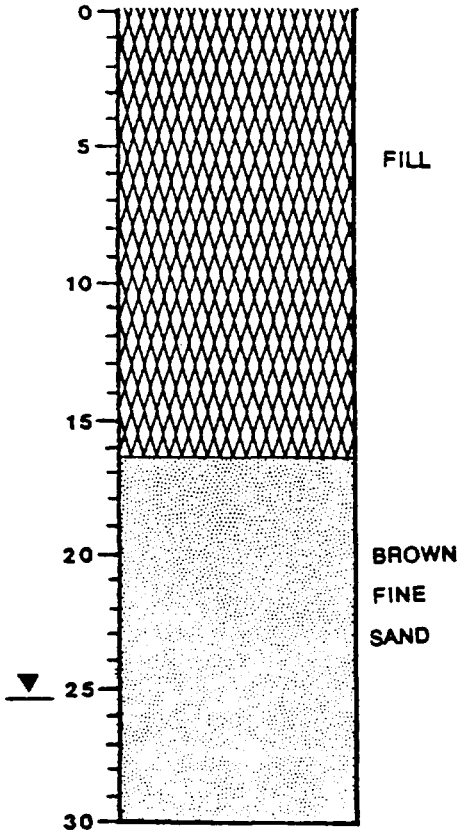
Site Dead Creek Site-P Boring/Well No. P-2

Sample Depth	Blow Count	Description
		Crushed limestone on surface.
1 - 2.5	6-6-7	FILL consisting of black-brown sandy CLAY with various debris including paper and plastic products, wood chips, slag, small gravel, fine to coarse grain sands, and brick fragments. Dry.
3.5 - 5	3-3-7	Same as above.
6 - 7.5	3-4-4	Same as above.
8.5 - 10	2-6-6	Same as above.
11 - 12.5	5-5-7	Same as above.
13.5 - 15	7-7-8	Same as above.
16 - 17.5	4-3-14	Same as above. Moist.
18.5 - 20	6-6-8	Same as above.
21 - 22.5	6 - 50/3	Same as above. Spoon refusal.
23.5 - 25	10-6-28	Same as above. Poor recovery.
26 - 27.5	3-5-5	No recovery. Probably same as above.
		FILL apparently discontinues @ 28'.
28.5 - 30	6-9-12	Dark gray fine to medium grain SAND. Moist.
33.5 - 35	7-11-10	Brown medium grain SAND. Wet.
38.5 - 40	7-12-14	Dense brown fine to medium SAND. Wet.
		E.O.B. @ 40'.

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-11-87
Prepared by Tim Maley

Depth (ft) Description

P – 3



Boring/Well No. P-3
Location Site P
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/11, 2/11/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 30.0 ft.
Casing and Screen Diam. _____
Screen Interval _____
Screen Type _____
Stickup _____
Well Type _____
Well Construction:
- Filter Pack _____
- Seal _____
- Grout _____
- Lock No. _____

TEST DATA

Static Water Elev. _____ Date _____
Static Water Elev. _____ Date _____
Slug Test Yes____ No____
Test Date _____
Hydraulic Conductivity _____
Other _____

WATER QUALITY

Samples Taken Yes____ No X
No. of Samples _____
Types of Samples _____

Date Sampled _____
Samplers _____
Samples Analyzed for _____

Split Samples Yes____ No X
Recipient _____

Comments _____

REMARKS

Ground elev. 419.36

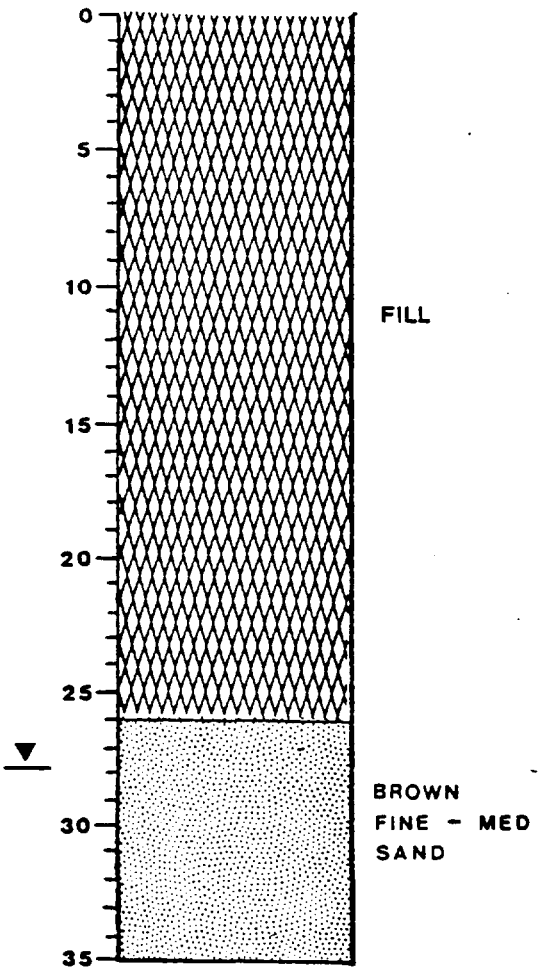
Site Dead Creek Site-P Boring/Well No. P-3

Sample Depth	Blow Count	Description
		Black cinder fill on surface.
1 - 2.5	7-9-12	FILL consisting of black and brown sandy clay with various debris material including paper products, wood chips, cloth, tin, rubber, slag, cinders, crushed limestone, an off-white crystalline substance, hay, and fine to coarse grain sand. Dry.
3.5 - 5	3-3-30/6	FILL - same as above.
6 - 7.5	3-3-6	FILL - same as above.
8.5 - 10	6-18-33	FILL - same as above.
11 - 12.5	12-12-13	FILL - poor recovery. Strong moth ball (naphalene) odor.
13.5 - 15	5-7-15	No recovery.
16 - 17.5	6-17-17	FILL - same as above.
		Fill discontinues @ approx. 16.5'.
		Gray silty very fine grain SAND. Dry.
18.5 - 20	5-7-9	Brown fine grain SAND. Dry.
21 - 22.5	4-6-9	Same as above.
23.5 - 25	3-3-5	Same as above. Moist.
26 - 27.5	4-10-8	Same as above. Wet.
28.5 - 30	5-9-11	Same as above. Wet.
		E.O.B. @ 30'

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-12-87
Prepared by Tim Maley

Depth (ft) Description

P - 4



Boring/Well No. P-4
Location Site P
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/12, 2/12/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 35.0 ft.
Casing and Screen Diam. _____
Screen Interval _____
Screen Type _____
Stickup _____
Well Type _____
Well Construction:
- Filter Pack _____
- Seal _____
- Grout _____
- Lock No. _____

TEST DATA

Static Water Elev. _____ Date _____
Static Water Elev. _____ Date _____
Slug Test Yes____ No____
Test Date _____
Hydraulic Conductivity _____
Other _____

WATER QUALITY

Samples Taken Yes____ No X
No. of Samples _____
Types of Samples _____

Date Sampled _____
Samplers _____
Samples Analyzed for _____

Split Samples Yes____ No X
Recipient _____

Comments Subsurface soil samples from boring 0 - 10' and 25 - 35' analyzed for HSL compounds.

REMARKS

Slight organic odor.

Ground elev. 424.65

Site Dead Creek Site-P

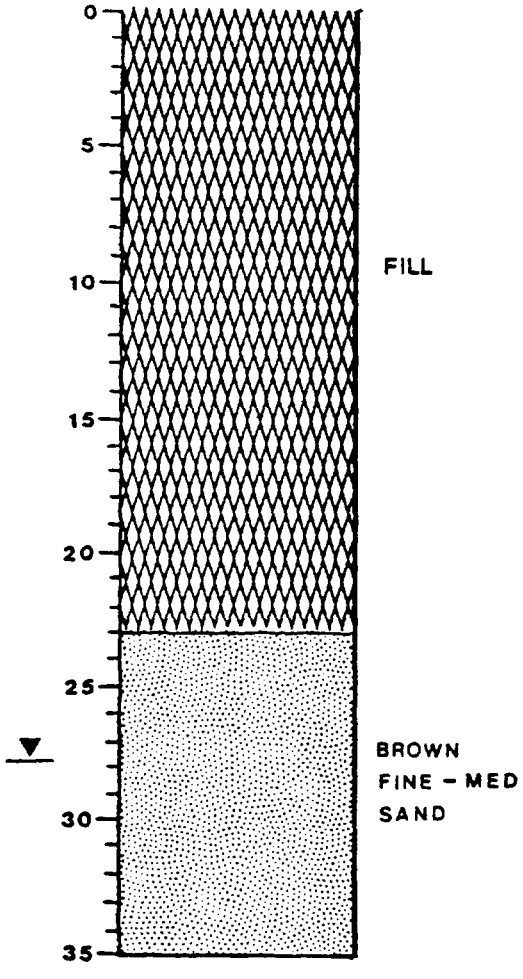
Boring/Well No. P-4

Sample Depth	Blow Count	Description
		Fill material on surface.
1 - 2.5	3-3-5	FILL consisting of dark brown-black silty clay; some crushed limestone, small gravel, and fine to medium grain sand.
3.5 - 5	4-9-8	FILL - same as above with more debris material including paper products and wood chips.
6 - 7.5	3-4-6	FILL - same as above.
8.5 - 10	5-7-22	FILL - same as above.
11 - 12.5	6-7-7	FILL - poor recovery.
13.5 - 15	2-9-5	No recovery.
16 - 17.5	7-14-19	FILL consisting of brown silty CLAY. Some medium-coarse grain sand and small gravel. Trace of a pale yellow solid (hard and brittle) substance. Dry.
18.5 - 20	2-10-2	FILL - same as above. Trace of paper products and wood chips.
21 - 22.5	13-27-17	FILL - same as above with additional debris including asphalt, slag, crushed limestone, wire, and gravel.
23.5 - 25	4-6-8	FILL - same as above.
		Fill discontinues at approx. 26'.
26 - 27.5	3-4-4	Brown fine grain SAND. Trace of silt. Moist.
28.5 - 30	5-10-10	Same as above. Wet.
31 - 32.5	3-6-10	Brown fine to medium grain SAND. Wet.
33.5 - 35	5-10-13	Same as above. Trace of coarse grain sand. Wet.
		E.O.B. @ 35'

Project Name Dead Creek
Project No. IL 3140
Date Prepared 2-12-87
Prepared by Tim Maley

Depth (ft) Description

P - 5



Boring/Well No. P-5
Location Site P
Owner IEPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/12, 2/12/87
Type of Rig Mobile B-61

Method of Drilling 3 3/4" I.D. hollow stem augers

WELL DATA

Hole Diam. 8 in.
Boring Depth 35.0 ft.
Casing and Screen Diam. _____
Screen Interval _____
Screen Type _____
Stickup _____
Well Type _____
Well Construction:
- Filter Pack _____
- Seal _____
- Grout _____
- Lock No. _____

TEST DATA

Static Water Elev. _____ Date _____
Static Water Elev. _____ Date _____
Slug Test Yes ___ No ___
Test Date _____
Hydraulic Conductivity _____
Other _____

WATER QUALITY

Samples Taken Yes ___ No X
No. of Samples _____
Types of Samples _____

Date Sampled _____
Samplers _____
Samples Analyzed for _____

Split Samples Yes ___ No X
Recipient _____
Comments Subsurface soil samples from boring 10 - 25' analyzed for HSL compounds.

REMARKS

Slight organic odor

Ground elev. 422.98

Site Dead Creek Site-P Boring/Well No. P-5

Sample Depth	Blow Count	Description
		Grass field area on surface.
1 - 2.5	4-5-7	FILL consisting of loose brown-black silty clay with crushed limestone, brick fragments, sand, and small gravel. Dry.
3.5 - 5	4-3-4	FILL - same as above with slag and cinder material.
6 - 7.5	1-2-1	FILL - same as above.
8.5 - 10	1-1-2	FILL consisting of brown-red silty clay. Mottled. Some medium grain sand and small gravel.
11 - 12.5	2-2-2	FILL consisting of brown silty CLAY.
13.5 - 15	1-1-2	FILL - same as above.
16 - 17.5	1-1-1	FILL consisting of brown silty CLAY. Trace of fine grain sand. Moist.
18.5 - 20	1-1-4	FILL - same as above. Trace of small gravel and asphalt.
21 - 22.5	1-2-3	FILL - same as above. Mottled.
		Fill discontinues @ approx. 23'.
23.5 - 25	2-4-7	Light brown fine to medium SAND. Dry.
26 - 27.5	2-4-6	Light brown fine to medium grain SAND. Trace of silt. Dry.
28.5 - 30	2-4-5	Brown fine grain SAND. Wet.
31 - 32.5	6-7-8	Same as above. Trace of coarse grain sand. Wet.
33.5 - 35	7-11-13	Same as above. Trace of coarse grain sand and small gravel. Wet.
		E.O.B. @ 35'

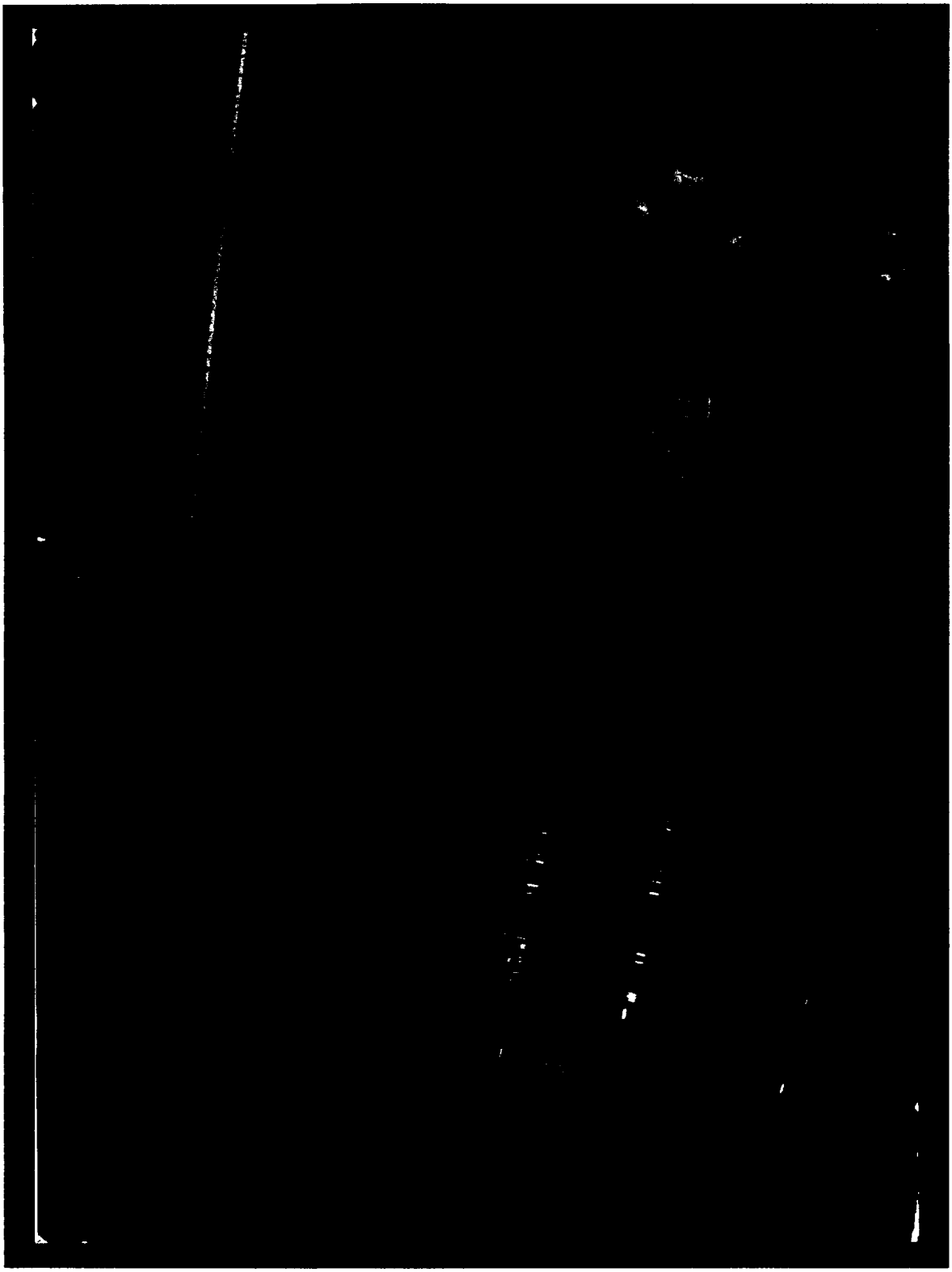
SDMS US EPA REGION V

COLOR-RESOLUTION - 2

IMAGERY INSERT FORM

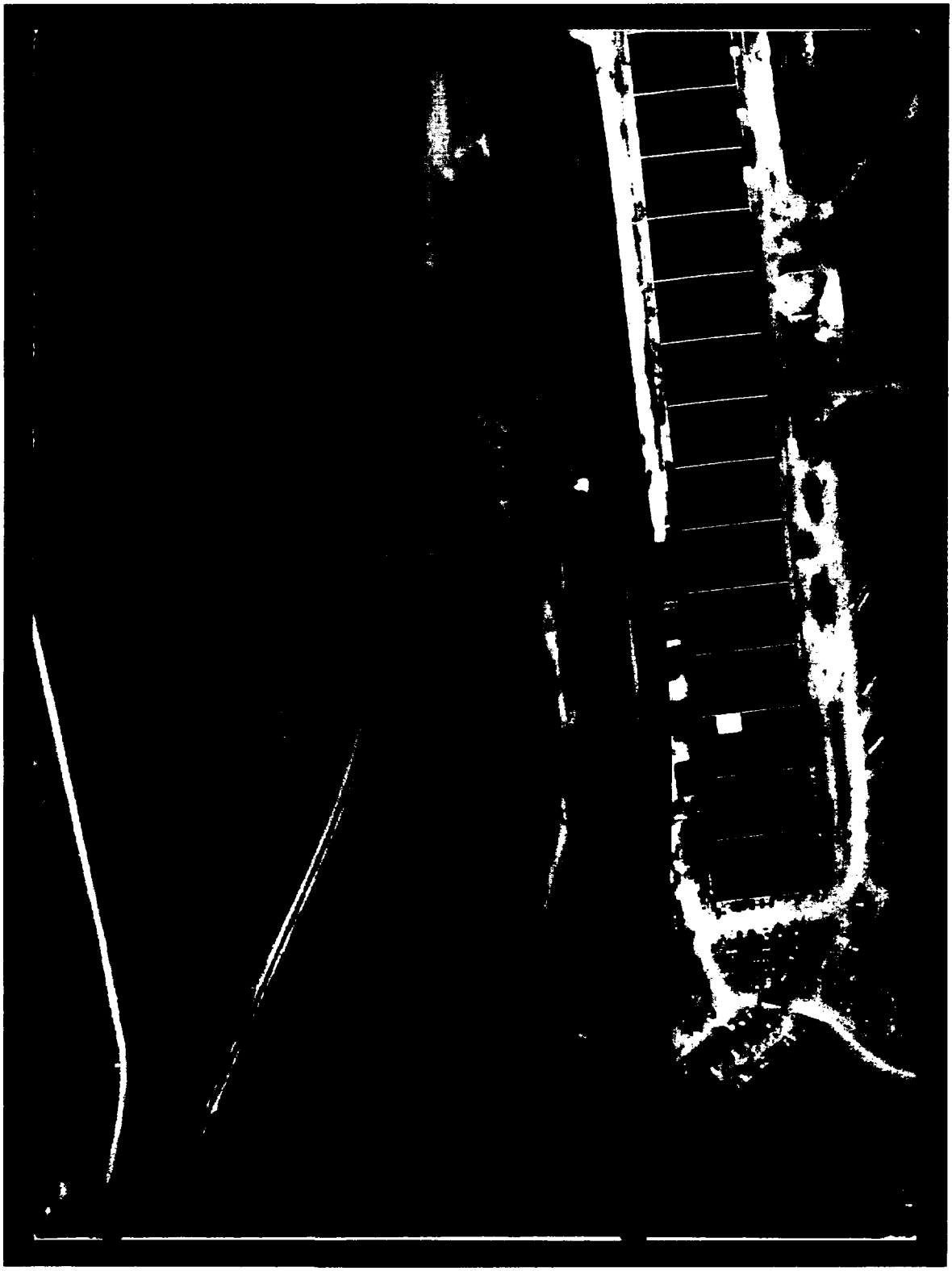
The following page(s) of this document include color or resolution variations. Unless otherwise noted, these pages are available in monochrome. The original document is available for viewing at the Superfund Records Center.

SITE NAME	SAUGET AREA 1
DOC ID #	**157439**
DESCRIPTION OF ITEM(S)	**AERIAL PHOTOGRAPHS (B&W)**
PRP	**SAUGET AREA 1**
DOCUMENT VARIATION	**__ COLOR OR _X_ RESOLUTION**
DATE OF ITEM(S)	**2/20/59**
NO. OF ITEMS	**3**
PHASE	**SAS**
OPERABLE UNITS	
PHASE (AR DOCUMENTS ONLY)	___ Remedial ___ Removal ___ Deletion Docket ___Original ___ Update # ___ Volume ___ of ___
COMMENT(S)	



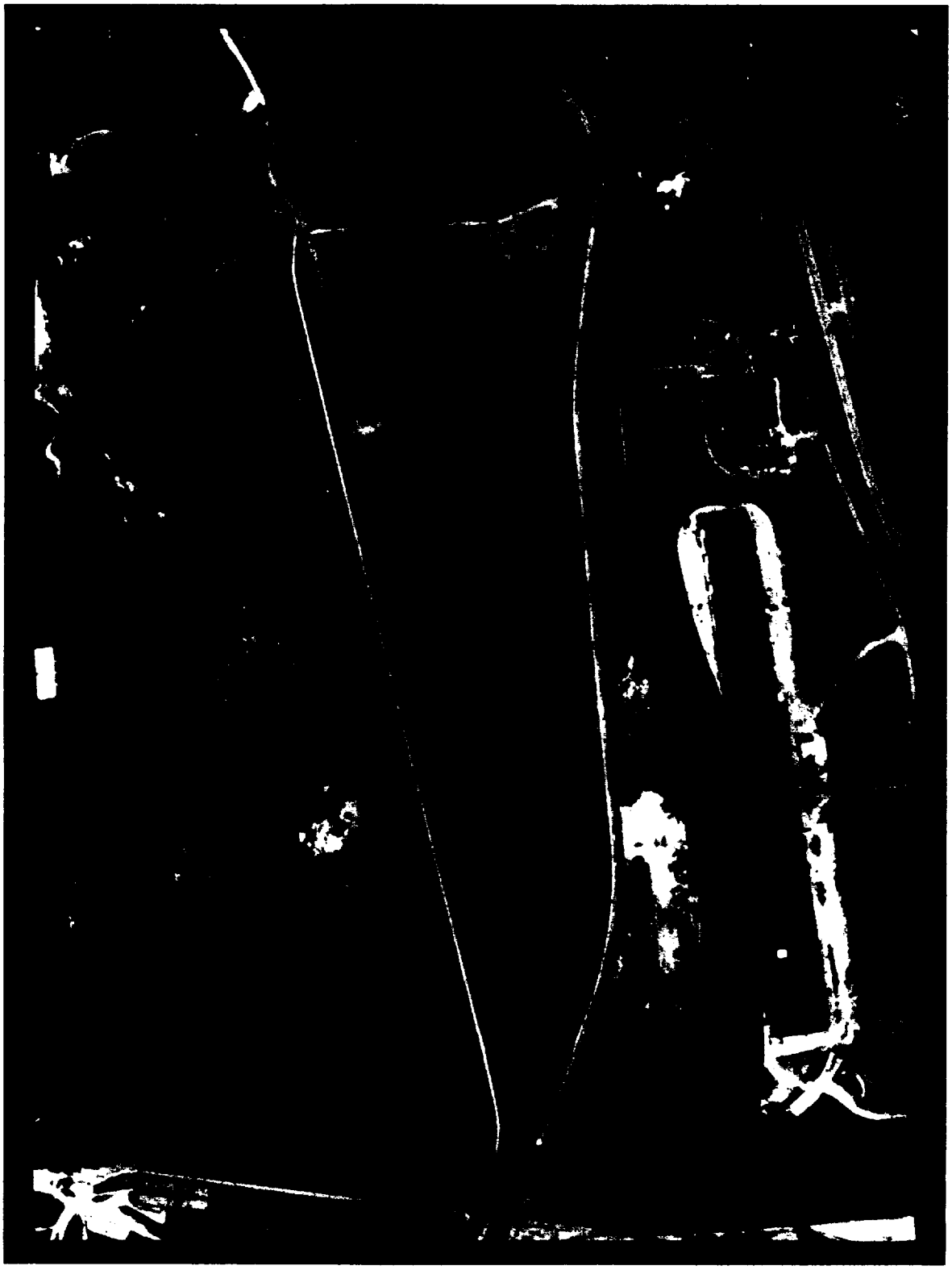
Source: IEPA, 1993. Base Map: Illinois Department of Transportation, February 20, 1959.
Scale: 1"=400'

AERIAL PHOTO



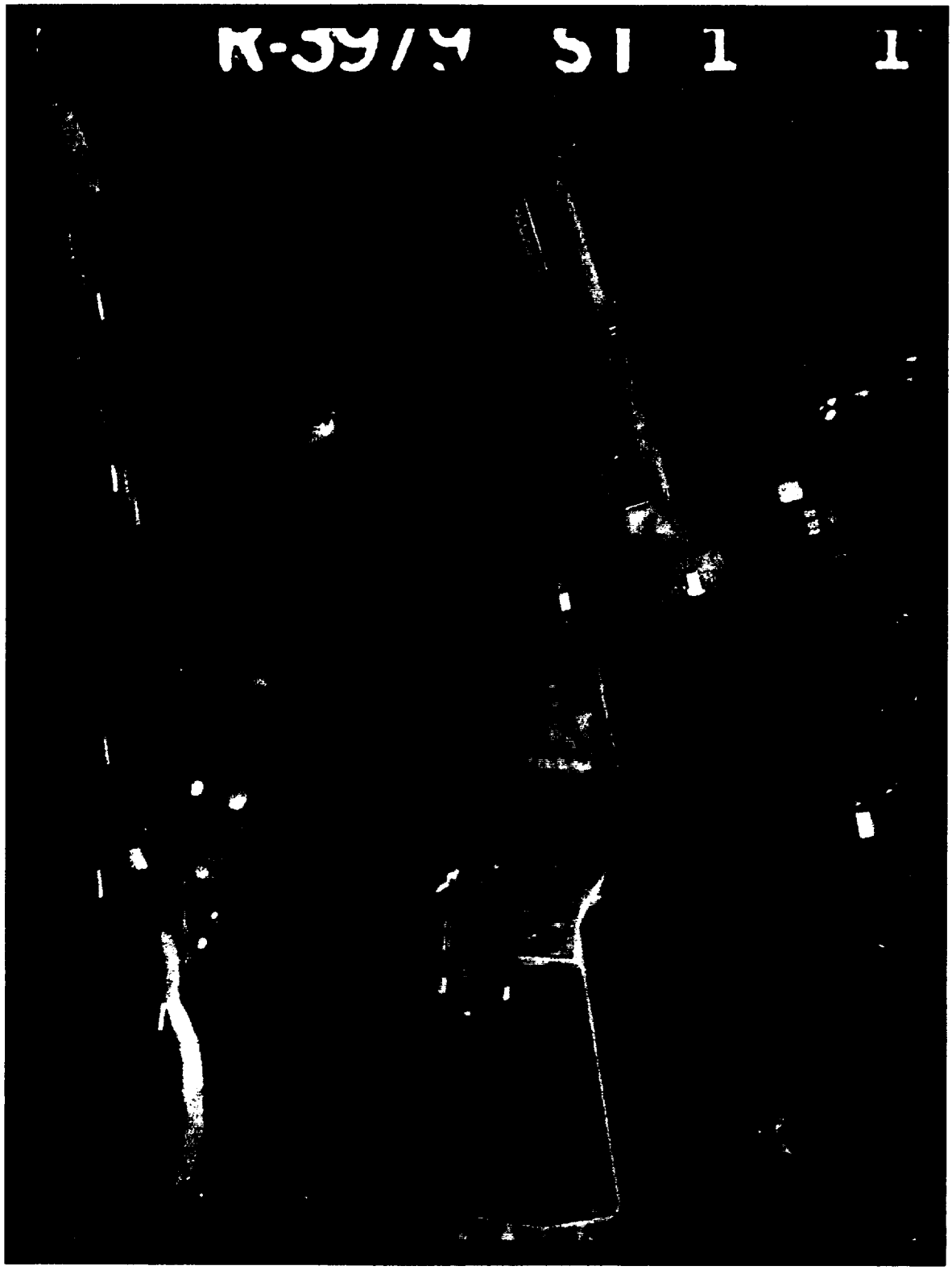
Source: IEPA, 1993. Base Map: Illinois Department of Transportation, March 4, 1975.
Scale: 1"=267'

AERIAL PHOTO



Source: IEPA, 1993. Base Map: Illinois Department of Transportation, April 7, 1978.
Scale: 1"=552'

AERIAL PHOTO



Source: IEPA, 1993. **Base Map:** Illinois Department of Transportation, January 13, 1986.
Scale: 1"=267'

AERIAL PHOTO

Plotted on Cahokia Quad. 137

LOG OF WATER WELL

perty owner Midwest Rubber Co. Planning Well No. #4
East St. Louis

lled by _____ Year 1951 May

Formations passed through	Thickness	Depth of Bottom
Clay	7	7
Dry yellow sand	21	28
Caving Sand	17	45
Fine gray Sand	9	54
Med. Coarse sand	6	60
Gtl. fine very dirty sand & silt	18	78
Coarse sand & Gravel	32	110

[Continue on back if necessary]

COUNTY No. 1940

ished in _____ to _____ ft.

ed with _____ inch _____ from 0 to _____ ft.

and _____ inch _____ from _____ to _____ ft.

e hole below casing _____ inch. Static level from surf. 36'10" ft.

ted capacity _____ gal. per min. Temperature _____ °F.

ter lowered to _____ ft. _____ in. in _____ hrs. _____ min.

ngth of test _____ hrs. _____ min. Screen _____

t _____ Diam. _____ Length _____ Bottom set at _____ ft.

[Show location in Section Plat]

wnship name _____ Elev. _____ Sec. 26

scription of location _____ Twp. 2N

_____ Rge. 10W

cation by Groundwater Inc. St. Clair

ned _____ County St. Clair

CLAIR NO ENVELOPE Index: 26-2N-10W

py for Illinois State Geological Survey

IQUE D AND MAIL ORIGINAL TO STATE
EALTH PROTECTION, 535 WEST
DO NOT ACH GEOLOGICAL/WATER
PROPER L LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 4-12-76

10. Property owner Clayton Chemical Co. Well No. _____
Address 101 S. Brentwood Clayton Mo.
Driller A. Charles Nuelle & Co. License No. 102-50
11. Permit No. 45480 Date 3-22-76
12. Water from Sand & Gravel Formation 13. County St Clair
at depth 40 to 78 ft.
14. Screen: Diam. _____ in.
Length: 10 ft. Slotted ✓
Sec. 26
Twp. 2N
Rge. 10W
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6 5/8	PVC	0	78

SHOW LOCATION IN SECTION PLAT

562'SL, 587'WL
SW (permit)

6. Size Hole below casing: 10 in.
7. Static level 15 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 200+ gpm for _____ hours. Sub. pump set at 60'.

8. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	40	40
Sand & Gravel	38	78

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

IGNED Robert W. Nuelle DATE 5-4-76

ST. CLAIR COUNTY No. 24077 26-2N-10W

1589 Well in Caledonia Quad. 1435

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 2

Drilled by Thorpe (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy soil	27	27
River silt	8	35
Coarse sand + pea gravel	8	43
Lt. fine sand + silt	21	64
Very coarse sand	6	70
Coarse sand, wood, Gravel, etc.	11	81
Very coarse sand	5	86
Very coarse sand + gravel	28	114

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch COUNTY No. 1938 from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. 25'6" ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____ Sec. 26

Description of location ____ Twp. 2N

Rge. 10W

Location by Engineering Survey Co.

Signed ____ County St Clair

•CLAIR

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

Mid. Rubber Reclaiming Co. Mrs. Luther

LOG OF WATER WELL

Property owner Midwest Rubber Co. Well No. 3

Drilled by Thorpe (Morgan) Year 1951 approx.

Formations passed through	Thickness	Depth of Bottom
Hard fill	3	3
Fine clay sand + silt	34	37
Med. fine sand very dirty	14	51
Med. coarse sand, dirty	11	62
Building sand some fine gravel	9	71
Clean coarse sand	23	94
Coarse sand + boulders	8	102
Med coarse sand	10	112

[Continue on back if necessary]

Finished in ____ to ____ ft.

Cased with ____ inch COUNTY No. 1939 from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. 35' Sept. 18 ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____ Sec. 26

Description of location ____ Twp. 2N

Rge. 10W

Location by Engineering Survey Co.

Signed ____ County St Clair

•CLAIR

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

Plotted on plat to

LOG OF WATER WELL

M.C. ∝

Property owner Monsanto Chemical Co. Well No. 20
¼ of Sly. BI in plant 15'E. from RR. spur. [K.W. # 3]
Drilled by Layne-Western (Millikin) Year 7-13-49

Formations passed through	Thickness	Depth of Bottom
ay	1	1
ldes	1	2
lay	2	5
ndy clay	26	31
Cdc. fine sand	30	61
ed. sand, gray	13	74
ed. to coarse sand	5	79
ch + coarse sand	2	81
oarse sand	3	84
oarse sand + gravel + small rocks	19	103

[Continue on back if necessary]

COUNTY No. 1949

shed in ____ at ____ to ____ ft.
d with ____ inch ____ from 0 to ____ ft.
and ____ inch ____ from ____ to ____ ft.
hole below casing ____ inch. Static level from surf. ____ ft.
ed capacity ____ gal. per min. Temperature ____ °F.
er lowered to ____ ft. ____ in. in ____ hrs. ____ min.
th of test ____ hrs. ____ min. Screen Shutter
____ Diam. ____ Length 25 Bottom set at ____ ft.

[Show location in Section Plat]

nship name ____ Elev. ____ Sec. 26
ription of location NW NE Sec. 26 Twp. 2 N
T 2 N, R 10 W Rge. 10 W
ied ____ County St. Clair
Signed ____ County St. Clair

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

Plotted on plat to IF 89
Illinois G.S.
Ind Log # 437

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 1
Drilled by Roger (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy loam	10	10
Dry sand	14	24
Coarse sand	14	38
Coarse sand, some gravel	4	42
Fine sand	24	66
Blk. fine sand	8	74
Coarse sand + boulders	8	82
Very coarse sand + gravel	24	106

[Continue on back if necessary]

Finished in ____ to ____ ft.
Cased with ____ inch COUNTY No. 1937 from 0 to ____ ft.
and ____ inch ____ from ____ to ____ ft.
Size hole below casing ____ inch. Static level from surf. 28' 2" ft.
Tested capacity ____ gal. per min. Temperature ____ °F.
Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.
Length of test ____ hrs. ____ min. Screen ____
Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____ Sec. 26
Description of location ____ Twp. 2 N
Rge. 10 W
Location as my drawn Section by Bill
Signed ____ County St. Clair Co

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

LOG OF WATER WELL

#17

Property owner Monsanto Chem. Co. Well No. 3

Drilled by H.C. Watson (Waly) Year July 1941

Formations passed through	Thickness	Depth of Bottom
Fill	10	10
Mud	8	18
Yellow Sand	10	28
Gray Sand (getting coarser)	35	63
#30 sand	15	78
#40 gravel	5	83
#50 "	5	88
#60 "	17	105 TD

[Continue on back if necessary]

COUNTY No. 1947

Finished in ____ to ____ ft.

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. 30 ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen Johnson

Slot 40 Diam. 16 Length 30' Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location SW, NE Sec. 26, T 2 N, R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Location by Groundwater Div. of St. Clair

Signed ____ County St. Clair

T. CLAIR

Copy for Illinois State Geological Survey No ENV 5 NE Index: 26-2N-10W

LOG OF WATER WELL

Property owner Monsanto Chem. Co. (80'S+E of main entrance gate) Well No. 19 K.W. # 2

Drilled by Layne-Western (J. Sallee) Year Aug. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder + Clay fill	2	2
Brown Sand	14	16
Brown + blue clay	2	18
Brown Silty sand	27	45+
Med gray sand	5	50
Soft fine clayey gray sand	5	55
Med. coarse sand + gravel, some rotten wood	6	61
Coarse sand + gravel	5	66
Black Mud sand, some gravel	7	73
Coarse sand + gravel	2	75
Coarse brown sand	5	80
Med. brownish gray sand + bullets	4	84
Coarse gray sand	6	90
" " " + gravel	18	108

[Continue on back if necessary]

COUNTY No. 1948

Finished in ____ to ____ ft.

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen Shutter

Slot ____ Diam. ____ Length 25 Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location NE NE Sec. 26, T 2 N, R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Signed ____ County St. Clair

CLAIR

Copy for Illinois State Geological Survey No ENKELO NE Index: 26-2 OW

380

LOG OF WATER WELL

erty owner Monsanto Chem. Co. Well No. 15

ed by H. L. Watson (Moretti) Year Feb. 1941 Mar. 1941

Formations passed through	Thick-ness	Depth of Bottom
alog	70	
ine sand	5	75
ine sand + gravel	5	80
arse sand + gravel	5	85
" " " "	5	90
arse sand	5	95
arse sand + gravel	5	100
" " " "	5	105
and + gravel	1½	106½ T.D.

[Continue on back if necessary]

lished in ____ at ____ to ____ ft.

COUNTY No. 1945

ed with ____ inch ____ from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

hole below casing ____ inch. Static level from surf. 34' ft.

ted capacity ____ gal. per min. Temperature ____ °F.

ter lowered to ____ ft. ____ in. in ____ hrs. ____ min.

gth of test ____ hrs. ____ min. Screen Johnson

60-80-100 Diam. 16" Length 25' Bottom set at ____ ft.

[Show location in Section Plat]

vnship name ____ Elev. ____

cription of location SW, NE Sec. 26, T 2 N, R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

ned ____ County St. Clair

ntained by Groundwater Div.

CLAIR No ENVELOPE 26-2N-10W

y for Illinois State Geological Survey Index:

LOG OF WATER WELL

#16

Property owner Monsanto Chem. Co. Well No. 16

Drilled by Watson (Waly) Year June 1941

Formations passed through	Thick-ness	Depth of Bottom
Fill	10	10
Mud	8	18
Fine yellow sand → ?		
Sand	20'	38
Gravel	38	76
Fine gravel	5	81
Gray gravel	10	91
Gravel	10	101
Gravel	5	106

[Continue on back if necessary] TD = 106'

Finished in ____ at ____ to ____ ft.

Cased with ____ inch ____ from 0 to ____ ft.

COUNTY No. 1946

and ____ inch ____ from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. 30 ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen Johnson

Slot ____ Diam. 16" Length 30' Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location SW, NE Sec. 26, T 2 N, R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Contained by Groundwater Div.

Signed ____ County St. Clair

CLAIR No ENVELOPE 26-2N-10W

Copy for Illinois State Geological Survey Index:

(22844—50M—9-55) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Redish sandy and blue silt		0	15
Grey sand little silt		15	20
Grey sand		20	25
Blue and grey sand		25	30
Fine grey sand		30	35
Fine grey sand and blue silt		35	40
Fine blue and grey sand		40	45
No recovery wash samole. Fine blue and grey sand		40	50
No recovery wash sample. fine blue and grey sand.		50	55
Fine blue sand, No recovery		55	60
Blue sand and wood no recovery		60	65
Grey and blue sand. No recovery		65	70
Fine blue sand. No recovery		70	75
Fine blue sand. No recovery		75	80
Medium blue sand. No recovery		80	85
Mixed grey and blue sand no recovery		85	90
Mixed grey and blue sand. No recovery		90	95
Mixed blue and grey sand. Could not drive sample Barrell. Felt like gravel		95	100
Blue and grey sand. No spoon sample taken.		100	105
Blue and redish sand. no spoon sample taken. Drove casing to 110'4". Set well screen at 108'11". Could not get any deeper as sand was running under casing.		105	110
Total Depth			110'4" TD

Location plat filed.
S.S.#29900

COMPANY Wabash Drilling Co.
FARM Monsanto Chemical Co. NO. SR-2
DATE DRILLED November 1956 COUNTY NO. 1987
AUTHORITY Wabash Drilling Co.
ELEVATION 412.5' refusal (MSL)
LOCATION 680'W of 90° 10'W longitude, 4310'N of 35° north latitude.
COUNTY ST. CLAIR Projected 26- 2N-10W

See Jack Bufe (or Kelly) Photo IF-88

Plotted on Photo

LOG OF WATER WELL

Property owner Monsanto Chem. Co. (Plant "B") Well No. 12

Drilled by H. C. Walker Year

Formations passed through	Thickness	Depth of Bottom
No log	70	
Fine sand	5	75
Coarse sand & gravel	5	80
Coarse sand & gravel	5	85
" " " "	5	90
" " " "	5	95
" " " "	5	100
Sand & gravel	5	105
" " "	5	110
Fine Boulders	2	112

[Continue on back if necessary]

Finished in at to ft.

COUNTY No. 1944

Cased with inch from 0 to ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 39'6" ft.

Tested capacity 1250 gal. per min. Temperature °F.

Water lowered to ft. in. In hrs. min.

Length of test hrs. min. Screen Johnson

Slot 60-80-100 Diam. 16 Length 27½' Bottom set at ft.

[Show location in Section Plat]

Township name Elev. Sec. 26

Description of location SE, NE Sec. 26, T2N, R10W Twp. 2N Rge. 10W

Located by Groundwater Inv. Signed County St. Clair.

Copy for Illinois State Geological Survey No ENTERED Index: 26-2 10W

375

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. Test well 2

Drilled by Layne-Western (E. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder fill	8	8
Sand green clay	4	12
Clay & black sand turning brown	3	15
Black & brown sand w/ clay	5	20
Brown sand	10	30
" " turning gray	5	35
Fine to Med. gray sand	5	40
Med. gray sand	10	50
Med. to Coarse gray sand	15	65
Med. gray sand	5	70
Sand & Boulders, blue clay showing	5	75
Fine to med. sand, silt, few Boulders	5	80
Med. sand, some gravel	5	85
Med. to Coarse sand & gravel	15	100
Coarse sand, gravel & Boulders	8	108
On rock at 106		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch COUNTY No. 1942 from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. 410 TOPO

Description of location NE, NE Sec. 26 T2N, R10W

Sec. 26 Twp. 2N Rge. 10W

Signed ____ County St. Clair

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

377

LOG OF WATER WELL

(same as well #4)

Property owner Monsanto Chem. Co. Well No. Test Hole 4

Drilled by Layne-Western (E. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinders	1	1
Brown to yellow clay	9	10
Brown soft sticky clay	20	30
Brown sand clay showing	10	40
Brown graded sand	3	43
Med. Sand, some gravel, clay showing	7	50
Fine graded sand & gravel	10	65
Med Sand, some coarse gravel - water at 68-70	5	70
Med. Sand, some gravel	5	75
Fine to Coarse sand & gravel, some clay	10	85
Medium fine sand, some gravel	5	90
Medium to coarse sand & gravel (bulk) 19'8"	19'8"	109'8"
on rock at 109'8"		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch COUNTY No. 1943 from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location NE, NE Sec. 26 T2N, R10W

Sec. 26 Twp. 2N Rge. 10W

Signed ____ County St. Clair

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

(2840—50M—12-61)

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
il	1'6"		1'6"
nd	34		35'6"
ne gravel	6		41'6"
avel & sand	24		65'6"
avel & boulders	13		84'6"
avel	5'6"		90
arse gravel & boulders	18		108

sted 1400 gallons per minute.

ter stands 12'6" from surface of ground.

ter stands 26'6" when pumping 1400 gallons per minute.

ze of well 24".

cubic yards of gravel.

aterial used in well:
50' of 38" Pit,
106'8" of 24" which includes 58' of 24" Shutter Screen & 48'4" of 24" Pit.

nd of seal used Steel Plug.

50'N and 50'E of crossing of Alton & Southern R.R. & Falling Springs Rd.

MPANY Layne & Bowler Company
RM Monsanto Chemical Works NO. 1
TE DRILLED May 8, 1920 COUNTY NO. 1741
THORITY Layne & Bowler Co.
EVATION 410' +
CATION *
UNTY ST. CLAIR

Projected 26-2N-10W

374

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. 1st well #1

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Soil Fill	1	1
Cinder fill	4	5
Cinders, yellow, green clay	5	10
Cinders + fine black sand	5	15
Fine black sand + clay	5	20
" " " , streak red gray sand	5	25
Fine black mucky sand, sand & gravel streaks	20	45
Red Coarse gray sand	10	55
Coarse gray sand	5	60
Fine, pebbly gray-brown sand boulders from 67'6" to	14	74
Sand + gravel, packed w/ much fine sand	3	77
Packed sand, gravel + boulders	3	80
Packed sand, gravel + Boulders	13	93
Sand + Boulders	9	102
		TD
(Formation in general is very tight)		

[Continue on back if necessary]

Finished in ____ at COUNTY No. 1941 to ____ ft.

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. 410 TOPO

Description of location SW NE Sec. 26, T 2 N, R 10 W

Sec. 26 Twp. 2 N Rge. 10 W

Signed ____ County St. Clair

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2-10W

287

LOG OF WATER WELL

erty owner Lewin - Mathes Well No.

ed by H.C. Watson (Well) Year June 1948

Formations passed through	Thickness	Depth of Bottom
wash	3	3
fine sand	12	15
" "	20	35
" " + gravel	10	45
ed sand + gravel	2	47
"	1	48
ub. Sand + gravel	4	52
" " " " + rock	10	62
" " " "	8	70
" " " "	5	75
" " " " + rock	5	80
fine sand	5	85
gravel sand + rock	5	90
coarse sand	5	95
Boulder	1	96
coarse sand + rock	5	101

[Continue on back if necessary]

COUNTY No. 1932

shed in ____ to ____ ft.

d with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

hole below casing ____ inch. Static level from surf. ____ ft.

ed capacity ____ gal. per min. Temperature ____ °F.

er lowered to ____ ft. ____ in. in ____ hrs. ____ min.

gth of test ____ hrs. ____ min. Screen ____

____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

nship name ____ Elev. ____ Sec. 26

cription of location NE, SW Sec. 26, T 2 N, R 10 W ____ Twp. ____

Rge. 10 W

ed ____ County St. Clair

for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

On Cahokia Quad. -86

LOG OF WATER WELL

Property owner Lewin - Mathes - Monsanto, Ill. Well No.

Drilled by H.C. Watson (Graves) Year Feb. 1947

Formations passed through	Thickness	Depth of Bottom
Fine Sand	70	70
Fine sand + gravel	8	78
Good formations	26	104 TD

COUNTY No. 1936

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot 30 Diam. 12" Length 26'5" Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____ Sec. 26

Description of location NE, SW Sec. 26, T 2 N, R 10 W ____ Twp. 2 N

Rge. 10 W

Location by Engineering Division

Signed ____ County St. Clair

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

RMIT # NF 08825	Thickness	Top	Bottom
4" test hole was first drilled to a depth of 111', then filled in with sand and later re-drilled with a bigger bit. Both records follow.			
ST HOLE			
ay		0	11
lty sand brown		12	21
ne sand brown		22	30
ne sand gray		31	41
dium sand gray		42	51
arse sand gray with pea gravel		52	56
arse sand gray with pea gravel		57	61
arse sand gray with pea gravel		62	86
ry coarse sand gray with 3/8" gravel		87	91
ry coarse sand gray with ½" gravel		92	96
ry coarse sand gray with ½" gravel		97	101
ry coarse sand gray with ½" gravel		102	104
ry coarse sand gray with ½" gravel		105	111
			TD
LL RECORD			
ay		0	18
nd coarse gray			20
nd coarse gray with gravel			25
nd fine			30
nd coarse gray with gravel			35
nd coarse gray with gravel			40
nd coarse gray with 1" gravel			45
nd coarse gray with 1" gravel		55	60
nd coarse gray with 3/4" gravel		65	70

ANY Luhr Brothers, Inc.
Cerro Copper & Brass Co. NO. 1
DRILLED July 10, 1970 COUNTY NO. 3208
ORITY Company
ATION
TION 1000' line, 400' W line of NW
TY ST. C .IR

26-2N-10W

	Thickness	Top	Bottom
Sand very coarse gray			75
Sand very coarse gray with cobbles to 5"		80	110½ TD
Well Casing:			
Material - Steel coated with bituminous			
Diameter: 20" outside diameter			
Length - 78.73'			
Wall Thickness - .075			
Final Casing Elevation Above Grade: 1'			
Size of Drilled Hole:			
40" to 20'			
38" to bottom			
Well Screen:			
Material - Stainless steel #304			
Diameter - 20" nominal			
Length - 31.82			
Slot Size - .100			
Type Make - UOP Johnson			
Depth of Screen set at 110.55'			
Gravel Filter:			
Used 23 tons Muscatine, 1/16" - 3/16" No. 3			
Wall Thickness - 8½"			
Feet Above Screen - 26'			
Static Level: 23.86'			
S.S. # 57106.			

Luhr Bros., Inc. Cerro Copper & Brass C 1
ST. CLAIR 26-2N-10W

E. St. Louis-Township Monsanto P. O.

Map No. 4W
R. 10W

ANY F. Thorpe- Engineer
Evans-Wallower Zinc Co. 2
ORITY F. Thorpe No.
ATION
ECTOR
IDENTIAL

T. 2N
Sec. 24 ?

DATE DRILLED March 1929

COUNTY NO. 1740 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Subsoil & clay	16		16	
Sand, extremely fine	11		27	
Sand, very fine, loamy	8		35	
Sand, very fine	11		46	
Sand, fine	6		52	
Sand, very fine	3		55	
Sand, fine, gritty	7		62	
Boulders up to 4" with some sand	5		67	
Regular building sand	14		81	
Sand, medium coarse	2		83	
Sand, very coarse	19		102	

"During the month of March, 1929, I installed a porous concrete well 30" I.D. and 40" O.D. at the plant of the Evans-Wallower Zinc Co. at Monsanto P.O., East St. Louis, Ill. and the above is the log of all the strata we went through in Well #2.

"The static level of water varies with the river level."
(Letter of F. Thorpe rec'd. 4-3-29)

NO ENVELOPE

County St. Clair
Index No. 04W24
T.—DRILL RECORD
24-2N-10W

7893 4M 5 29 26

TOWN East St. Louis WNSHIP
COMPANY Thorpe Concrete Well Co.
FARM Certain-teed Products No. 3
AUTHORITY written log
ELEVATION 416 topo.
COLLECTOR Ireland DATE DRILLED 4-34
CONFIDENTIAL 18th and Broadway

Map No. 4W
R. 10W

T. 2 N
Sec. 24

No.	COUNTY NO. 1739 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Cinder fill	6		6	
	Gumbo	4		10	
	Soil, sandy	7		17	
	Sand, fine	10		27	
	Sand, extremely fine	13		40	
	Sand, fine, loamy	13		53	
	Sand, fine, gritty	7		60	
	Clay, blue	4		64	
	Sand, quick	26		90	
	Sand, fine	2		92	
	Sand, gritty	9		101	
	Gravel, fine	6		107	
	Sand, coarse	2		109	
	Boulders 2" to 10"	7		116	
	Baits drilled 3 wells	1-21		120	
		7-17		120	
		11-17		119	

NO ENVELOPE

County ST. CLAIR
Index No. 04W 24
T.—DRILL RECORD
24-2N-10W

47327—10M—4-35 4 Illinois Geological Survey, Urbana.

John C. Moore Corporati chester, N. Y. Binder and holes in leaves, each Patented 1906. 302136

(575—5M—7-23)

TOWNSHIP MAP No. 4W

COMPANY Union Electric Light and Power 10W

FARM 300 ft. S. of North property Line

AUTHORITY 50 ft. E. of Eastern Inner 2 Proj.

ELEVATION Harbor Line HOLE No. 6 N 23

COLLECTOR DATE DRILLED

COUNTY NO. 1532 STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Water	16		16	
Sand, fine	12		28	
Sand, coarse	10		38	
Sand, very coarse 1/2 in. gravel	10		48	
Sand, coarse	27		75	
Sand, coarse 5% 1/2 in. gravel	4		79	
Sand, coarse 25% 1/2 in. gravel	4		89	
Sand, coarse 40% 3 in. gravel	3		92	
Sand with gravel	12	8	104	8

Minus 76.06 rock

St. Clair

unty Index No.

DRILL RECORD Projected 23-2N-10W

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 302136

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W

COMPANY Union Electric Light & Power 10W

FARM 100 ft. S. of N. property Line on

AUTHORITY Eastern Inner Harbor Line. 2 Proj.

ELEVATION HOLE No. 7 N 23

COLLECTOR DATE DRILLED

No.

COUNTY NO. 1533 STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Water	35		35	
Sand, fine	5		40	
Sand, coarse	10		50	
5% 2 in. gravel				
Sand, coarse	15		65	
15% 1/8 in. gravel				
Sand, coarse	12		77	
20% 1 1/2 and 10% 1/8 in. gravel				

St. Clair

unty Index No.

DRILL RECORD Projected 23-2N-10W

John U. Moore Corporation ...ester, N. Y. Binder and holes in leaves, each Patented 1908. 306742

(575—5M—7-23)

...TOWN Cahokia TOWNSHIP MAP No. 4W 10W
...NY Union Electric Light & Power
...100 ft. S. of N. property line
...RITY 258 ft. E. of Eastern Inner 2 N Proj. 23
...TION Harbor line. HOLE No. 1
...CTOR DATE DRILLED

...OUNTY NO. 1730

STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
...ud, black and fine sand	30		30	
...and, fine	4		34	
...and, coarse	2		36	
5% 1/8 in. gravel				
...5% 1/4 in. gravel	2		38	
...0% 2½ in. gravel	2		40	
...and, coarse	8		48	
30% 1/8 to 1 in. gravel				
...and, coarse	4		52	
10% 1/4 in. gravel				

...nty St. Clair Index No. 0461
...RILL RECORD ILLINOIS STATE Projected 23-2N-10W

...O. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908. 303216

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W 10W
COMPANY Union Electric Light and Power
FARM 300 ft. S. of N. Property Line
AUTHORITY 250 ft. E. of Eastern Inner 2 N Proj. 23
ELEVATION Harbor line HOLE No. 2
COLLECTOR DATE DRILLED

COUNTY NO. 1731

No.	STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Sand, fine	10		10	
	Sand, very fine	8		18	
	Mud, black	6		24	
	Mud, black and fine sand mixed	11		33	
	Sand, fine. 10% 1/4 in. gravel	5		38	
	Sand, coarse. 15% 1/2 in. gravel	5		43	
	Sand, coarse 20% 1/2 in. gravel	5		48	
	Sand, fine	5		53	
	Sand, coarse. Pieces of soapstone	5		58	
	Sand, coarse 5% 1/4 in. gravel	8		66	
	Sand, coarse 10% 1/2 in. gravel	6		72	
	Sand, coarse 20% 4 in. gravel	4		76	
	Sand, coarse, 20% 3/4 in. gravel	15		91	
	Sand, coarse	10		101	

Minus 73.66 Rock

County St. Clair Index No.
DRILL RECORD ILLINOIS STATE Projected 23-2N-10W

Rte 1F-36

321

Mr. Ing

LOG OF WATER WELL

Property owner American Zinc Co. Monsanto, Ill. Well No. 8

Drilled by H.L. Walton Year Feb. 1946

Formations passed through	Thickness	Depth of Bottom
Gumbo	20	20'
Quick Sand	30	50'
Sand	16	66'
Med. Sand	10	76
No Log	26	102
TD=102		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch ____ from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen Cook

Slot ____ Diam. 16 Length 30' Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location SE, NE Sec. 23 T 2N, R 10W 4th P.M.

Location by Brown Quarter Div.

Sec. 23 Twp. 2N Rge. 10W

Signed ____ County St. Clair

C. CLAIR 23-2N-10W

Copy for Illinois State Geological Survey No ENVELOPE Index:

LOG OF WATER WELL

Property owner American Zinc Co. Monsanto, Ill. Well No. 9

Drilled by H.L. Walton (G.W. Finks) Year Nov. 1950

Formations passed through	Thickness	Depth of Bottom
Mud	35	35
Sand	45	80
Medium sand	20	100
Sand & coarse gravel	4	104
TD=104'		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch ____ from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. 40" Length 60' Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location SW, SE Sec. 23 T 2N, R 10W 4th P.M.

Location by Brown Quarter Div.

Sec. 23 Twp. 2N Rge. 10W

Signed ____ County St. Clair

CLAIR No ENVELOPE 23 10W

Copy for Illinois State Geological Survey Index:

(36941—50M—2-67)27-0

ILLINOIS GEOLOGICAL SURVEY, URBANA

DUSTRIAL Permit #NF4849	Thickness	Top	Bottom
llow brown clay		0	10
ne sand brown		10	25
dium coarse sand brown		25	30
arse sand brown with pea gravel		30	35
arse sand brown		35	40
dium coarse sand brown		40	55
dium fine sand brown		55	60
ne sand brown		60	70
ry coarse sand gray with 1½" gravel		70	80
ry coarse sand gray with ¼" gravel		80	85
ry coarse sand gray with 3/4" gravel		85	90
ry coarse sand gray with ½" gravel		90	95
ry coarse sand gray with 3/8" gravel		95	100
ry coarse sand gray with 1" gravel		100	105
ry coarse sand gray with 3/4" gravel		105	107
ry coarse sand gray with ¼" gravel		107	113
ry coarse sand gray with ½" gravel		113	116
			TD
ze of hole 38"			
sing: 88" - 18" outside diameter steel			
Casing elevation 2' above grade			
atic water level 36.9' top of casing			
tons gravel pack 11" wall 45' above screen			
reen: Johnson Stainless Steel 18" nominal			
iameter. Length 30' set at 116'			
ot size: .060'			
o well 300' apart were drilled under Permit NF4849 S.S. # 55984			
ENVELOPE			
* North Reservoir			

ANY Luhr Brothers, Inc.
Midwest Rubber Reclaiming Co. 10
DRILLED September 3, 1968 COUNTY NO. 2856
ORITY Luhr Bros. Inc.
ATION
TION Lot 209 Third Subdivision of Cahokia*
TY ST. CLAIR Commonfields 23?-2N-10 W

(36941—50M—2-67)?

ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTRIAL Permit #NF4849	Thickness	Top	Bottom
Brown Clay		0	5
Brown silty sand		5	20
Fine sand brown		20	25
Fine sand gray		25	30
Coarse sand gray with pea gravel		30	35
Medium coarse sand gray		35	40
Coarse sand gray		40	45
Medium fine sand gray		45	55
Very coarse sand gray with pea gravel		55	60
Medium coarse sand gray		60	65
Very coarse sand gray with 3/4" gravel		65	70
Medium coarse sand gray with pea gravel		70	75
Very coarse sand gray with 3/4" gravel		75	110
Very coarse sand gray with 1" gravel		110	115.5
			TD
Size of hole 38"			
Casing: 88.70' - 18" outside diameter steel			
Casing elevation 3.2' above grade			
Static water level 37'			
26.5 tons gravel pack 11" wall 55' above screen.			
Screen: Johnson Stainless Steel 16" nominal diameter. Length 30' set at 115.5'			
Slot size: .060			
Two wells 300' apart were drilled under Permit #NF4849 NO ENVELOPE			
* Southwest Reservoir S.S.#55983			

COMPANY Luhr Brothers, Incorparted.
FARM Midwest Rubber Reclaiming Co. 11
DATE DRILLED September 6, 1968 COUNTY NO. 2857
AUTHORITY Luhr Bros. Inc.
ELEVATION
LOCATION Lot 209 Third Subdivision of Cahokia*
COUNTY ST. CLAIR Commonfields 23?-2N-10W

Platteville
Ak. 1F37

322

LOG OF WATER WELL

American Zinc Co. - Monsanto

Property owner United Engineers + Const. Inc. E. St. Louis Well No. 6

Drilled by H. L. Watson (Sandersmill) Year Nov. 1940

Formations passed through	Thickness	Depth of Bottom
Cinder + Mud	15	15
Fine sand	60	75
Good water bearing formation	30	105
Quicksand to soapstone	2	107

Abandoned

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

COUNTY No. 1926

Size hole below casing ______ inch. Static level from surf. 34 ft.

Tested capacity 1500 gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen Cook

Slot 120 Diam. 16 Length 30' Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 23

Description of location SE, SE Sec 23 Twp. 2N

T 2N, R 10W ... Rge. 10W

Location by Drawn Water Line

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey No ENVELOPE Index: 23-2N-10W

LOG OF WATER WELL

Property owner United Engineers Well No. 7

American Zinc Co. Monsanto, Ill.

Drilled by Watson (Moretti + Claridge) Year Jan. 1942

Formations passed through	Thickness	Depth of Bottom
Dirt	5	
Fine sand	45	50
Coarse sand	25	75
Gravel	30	105

COUNTY No. 1929

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 33' 6" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot 40+50 Diam. 16" Length 30' Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. 404 TOPO Sec. 23

Description of location SE, SE Sec 23, T2N, R10W Twp. 2N

800' N 90° 10' 7000' N 38° 35' ... Rge. 10W

Location by Drawn Water Line

Signed ______ County St. Clair

ST. CLAIR 23-2N-10W

Copy for Illinois State Geological Survey No ENVELOPE Index: